

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH CAROLINA
CHARLESTON DIVISION

Ashley II of Charleston, LLC,)	Civil Action No. 2:05-cv-2782-MBS
)	
Plaintiff,)	
)	
v.)	AMENDED
)	ORDER AND OPINION
PCS Nitrogen, Inc.,)	
)	
Defendant/Third-)	
Party Plaintiff,)	
)	
v.)	
)	
Ross Development Corporation;)	
J. Holcombe Enterprises, L.P.; James H.)	
Holcombe; J. Henry Fair, Jr.; Allwaste)	
Tank Cleaning, Inc. n/k/a PSC Container)	
Services, LLC; Robin Hood Container)	
Express, Inc.; City of Charleston, South)	
Carolina,)	
)	
Third-Party)	
Defendants.)	
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This is a cost-recovery action brought under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, 42 U.S.C. §§ 9601, *et seq.*, to recover costs incurred to remediate 33.95 acres of a 43 acre parcel of land in Charleston, South Carolina (“the Site”). On September 26, 2005, this lawsuit was filed under CERCLA § 107 (42 U.S.C. § 9607) by one of the Site’s current owners, Ashley II of Charleston, LLC (“Ashley”), against PCS Nitrogen, Inc. (“PCS”), seeking a declaratory judgment that PCS is jointly and severally liable for the cost of remediating the Site; and a money judgment in the amount of \$194,232.94 to reimburse Ashley for costs of remediation that it has already incurred. [Entry 1 at ¶¶ 28-36; Entry

209 at ¶¶ 31-37]. This court has jurisdiction pursuant to 28 U.S.C. § 1331 and CERCLA. Venue is proper in this district pursuant to 28 U.S.C. § 1391(b) and (c), and 42 U.S.C. § 9613 because the claims arise, and the releases of hazardous substances occurred at the Site, which is located in the District of South Carolina.

PCS filed contribution claims pursuant to CERCLA § 113(f)(1) against Ashley, Ross Development Corporation (“Ross”); Koninklijke DSM N.V., and DSM Chemicals of North America, Inc. (collectively “the DSM Parties”); James H. Holcombe (“Holcombe”), J. Holcombe Enterprises, L.P. (“Holcombe Enterprises”), and J. Henry Fair, Jr. (“Fair”) (collectively “The Holcombe and Fair Parties”); Allwaste Tank Cleaning (n/k/a PSC Container Services, LLC) (“Allwaste”); Robin Hood Container Express, Inc. (“RHCE”); and the City of Charleston, South Carolina (“the City”), alleging that they are potentially responsible parties (“PRPs”).¹ [Entry 226].

Pursuant to § 113 of CERCLA, Ross filed counterclaims against PCS and cross-claims against the Holcombe and Fair Parties, the DSM Parties, RHCE, the City, and Allwaste. [Entry 239 at 12-18]. RHCE filed § 113 counterclaims against PCS and cross claims against the DSM Parties, the Holcombe and Fair Parties, Allwaste, and the City. [Entry 231 at 8-11]. The Holcombe and Fair Parties have filed counterclaims against PCS and cross-claims against Ross and the DSM Parties pursuant to § 113. [Entry 234 at 10-12]. The City has filed a § 113 counterclaim against PCS. [Entry 228 at 7-8]. PCS, Ross, RCHE, the Holcombe and Fair Parties, and the City all seek a judicial determination of their rights to future cost recovery and contribution pursuant to 28 U.S.C. §§ 2201

¹To the extent any party other than Ashley alleged claims pursuant to § 107, these parties are limited to recovery under CERCLA § 113. See *United States v. Atlantic Research Corp.*, 551 U.S. 128, 138 (2007) (explaining that § 107 actions lie when a party has itself incurred clean up costs and that § 113 actions lie when a party is reimbursing costs paid by others).

and 2202. [Entry 226 ¶ 50; Entry 231 ¶ 50; Entry 234 ¶¶ 55, 63; Entry 228 at 9].

This case was bifurcated into liability and allocation phases by order of The Honorable C. Weston Houck on July 25, 2006. [Entry 56]. From February 20, 2007 to February 22, 2007, Judge Houck held a bench trial for the liability phase. [Entries 107, 108, 109 and 115]. On September 28, 2007, pursuant to Federal Rule of Civil Procedure 52, Judge Houck entered Findings of Fact and Conclusions of Law determining PCS to be the successor-in-interest to former Site owner, Columbia Nitrogen Corporation (“CNC”). [Entry 118]. On January 5, 2009, Judge Houck disqualified himself from further participation in the case. [Entries 307 and 308]. The case was reassigned to the undersigned on January 6, 2009. [Entries 307 and 308].² On August 13, 2009, this court granted summary judgment to the DSM Parties. [Entry 409].

From October 26, 2009 to November 6, 2009 and continuing from January 19, 2010 to January 27, 2010, the court held a bench trial for the allocation phase. [Entries 472, 473, 475-478, 480, 483, and 484]. This case is currently before the court on three motions for judgment on partial findings filed during trial by Allwaste, the Holcombe and Fair Parties, and RHCE [Entries 517, 520 and 521]; as well as findings of fact and conclusions of law as to allocation pursuant to Federal Rule of Civil Procedure 52(a). On June 2, 2010, each of the parties submitted proposed findings of fact

² On June 2, 2009, this court denied PCS's motion to vacate Judge Houck's orders, but permitted PCS to file motions for reconsideration of 1) Judge Houck's April 22, 2008 order denying PCS's motion to certify the Court's findings of fact and conclusions of law for interlocutory appeal (Entry 164), and 2) Judge Houck's June 13, 2008 order denying PCS leave to amend its complaint to join former shareholders of Ross Development Corporation (“Ross”) to this action (Entry 194). Entry 384. On July 27, 2009, PCS filed a motion for reconsideration of the court's order denying it a certificate of appealability of the phase I ruling under § 1292(b). Entry 402. That same day, PCS filed a motion for reconsideration of the court's order denying it leave to amend its complaint to add claims against the Ross shareholders. Entry 405. On August 17, 2009, PCS also filed a motion under § 1292(b) for certification of the court's June 2, 2009 order denying PCS's motion to vacate Judge Houck's rulings. Entry 412. On October 13, 2009, the court held a hearing on PCS's various motions for reconsideration and leave to file. Entry 462. The court denied PCS's motions for reconsideration and leave to file. *Id.*

and conclusions of law. PCS's responses to the motions for judgment on partial findings were contained within its proposed findings. [Entries 556-558].

Federal Rule of Civil Procedure 52(c), which governs judgments on partial findings, provides in pertinent part:

If a party has been fully heard on an issue during a nonjury trial and the court finds against the party on that issue, the court may enter judgment against the party on a claim or defense that, under the controlling law, can be maintained or defeated only with a favorable finding on that issue. The court may, however, decline to render any judgment until the close of the evidence.

Judgments entered pursuant to Rule 52(c) "must be supported by findings of fact and conclusions of law." Fed. R. Civ. P. 52(c). Under Rule 52(c), a court assesses the evidence and may enter a judgment if the evidence is insufficient to support a claim or defense. *See generally Carter v. Ball*, 33 F.3d 450 (4th Cir. 1994); Fed. R. Civ. P. 52. Rule 52(a) directs that when an action is tried without a jury, a court "must find the facts specially and state its conclusions of law separately." Fed. R. Civ. P. 52(a). Having carefully considered the testimony, exhibits, deposition excerpts, trial briefs, and proposed findings of fact and conclusions of law, the court makes the following findings.

I. FINDINGS OF FACT

A. Current Site Conditions

1. The property at issue consists of approximately forty-three acres in the Upper Peninsula area of Charleston, South Carolina, and is located at the end of Milford Street, abutting the Ashley River. [Ash. Ex. 162, 195]. The westernmost 33.95 acres of the property is the area that requires remediation and is the area referred to as "the Site." [Entry 194 at 12].
2. Ashley seeks reimbursement of \$194,232.94 in costs associated with the remediation of the Site. The costs claimed are itemized with invoices. [Ash. Exs. 231, 232, 247, 248, 250, 251,

- 252]. The listed costs were actually paid by Ashley. [Ash. Exs. 231, 232, 247, 248, 250, 251, 252].
3. The environmental conditions at the Site have been comprehensively studied and investigated by experts, including experts from the United States Environmental Protection Agency (“EPA”) and the South Carolina Department of Health and Environmental Control (“DHEC”). [Ash. Ex. 256, at 9-13; Trial Tr. 23:10-16].
 4. There are four conditions at the Site that the remediation seeks to correct: arsenic contamination, lead contamination, low pH, and carcinogenic polycyclic aromatic hydrocarbon (“cPAH”) contamination. [PCS Exs. 216, 218; Trial Tr. 1298:5-14; Ash. Exs. 91, 162].
 5. Arsenic and lead contamination are found across the entire Site. [Ash. Ex. 140, Trial Tr. 646:3-24, 663:22].
 6. The contamination at the Site is related to historic operations of a fertilizer plant at the Site. As part of the fertilizer manufacturing process, pyrite ore was burned as feedstock to create sulfuric acid. [PCS Ex. 1 at 7; PCS Ex. 218 at 1-2]. Cinders of pyrite ore that “did not burn completely in the combustion process” resulted in the creation of pyrite slag. [PCS Ex. 1 at 15; PCS Ex. 218 at 1-2]. Pyrite slag contains arsenic and lead. [Trial Tr. 649:10-19, 892:23-893:4, 914:4-7, 1059:3-5, 1451:7-14].
 7. The use of pyrite ore in fertilizer manufacturing operations is the source of the vast majority of the arsenic contamination at the Site. [Trial Tr. 637:2-4, 899:1-5, 1900:19-22].
 8. Another source of lead at the Site, other than pyrite slag, is lead sludge that was rinsed from lead acid chambers, which were used to make sulfuric acid during the operation of the fertilizer plant. [Trial Tr. 892:23-893:4, 1449:13-20; PCS Ex. 218 at 1, 10; O. Carter Dep.

17:8-18:3, Sept. 1, 2009].

9. There are two hot spots for cPAHs on the Site. One location is in the southwest corner of the Site and the other is on the Allwaste Parcel. [Trial Tr. 941:24-942:10]. The source of the cPAH contamination was a fire that destroyed a major portion of the acid plant in 1963. [Ash. Ex. 230 at 40; Trial Tr. 941:24-942:10, 950:14-951:3].
10. The low pH of the soil and groundwater on the Site means that there are acidic conditions at the Site. These conditions are caused by a process referred to as “acid mine drainage” in which sulfides in pyrite ore react with groundwater and oxygen to produce hydrogen ions. [PCS Ex. 1 at 20; Trial Tr. 1493:22-1494:9]. Arsenic and lead percolate through the soil and into the groundwater on the Site more readily in low pH conditions. [Trial Tr. 1460:13-23].
11. The majority of the Site is currently covered with a limestone run of crusher (“ROC”) layer that is graded to promote better drainage. [Ash. Ex. 80 at A-EPA 006141; Trial Tr. 774:7-18].

B. Remediation Plan

12. EPA has determined that the Site meets the requirements for initiating a Non-Time-Critical Removal Action under the National Contingency Plan. [Ash Ex. 162 at A00859, A00868].
13. In October 2005, EPA published its first remediation plan for the Site. [PCS Ex. 216]. This plan included three basic parts. First, soils contaminated with arsenic contamination above 37.3 milligrams per kilogram (mg/kg), or with lead contamination above 895 mg/kg, were to be removed from the Site and replaced with clean back fill. [PCS Ex. 216 at 6]. Second, any soil remaining onsite with arsenic over 22.5 mg/kg or with lead over 400 mg/kg would be covered with a cap. [PCS Ex. 216 at 60]. Third, groundwater would be directed to a

sewer for treatment. [PCS Ex. 216 at A 00864; PCS Ex. 218 at A 00718]. The total cost of EPA's first remediation plan was to be approximately \$7,900,000 in 2005 dollars. [PCS Ex. 218 at A 00718].

14. In March 2008, Ashley submitted a plan, designed by engineering firm Entact, to implement the soil and sediment components of EPA's remediation plan (the "Entact Plan"). [Ash. Ex. 194; Trial Tr. 556:19-561:13]. In the Entact Plan, it was estimated that the implementation of EPA's plan would require the excavation and offsite disposal of 35,337 cubic yards of soil and 800 cubic yards of sediment. [Ash. Ex. 194 at A04_04861, A04_04863]. The Entact Plan also calls for the consolidation and capping of 9,500 cubic yards of soil for areas in which the contamination levels are higher than 22.5 mg/kg for arsenic and 400 mg/kg for lead (the residential standard), but lower than 37.3 mg/kg for arsenic and 895 mg/kg for lead (the industrial standard). [Ash. Ex. 194 at A04_04861-2, A04_04868-9].
15. Ashley also developed alternative proposals for the remediation of the Site. [PCS Ex. 200; Trial Tr. 540:2-13]. In June 2008, Ashley proposed an alternative groundwater remedy involving the use of geochemical sequestration. [PCS Ex. 229 at A04_05150, A04_05165]. Ashley also proposed mixing the 9,500 cubic yards of soil that was to be capped with a chemical stabilizer that would treat the contaminants in the soil and prevent contamination from leaching into the groundwater. [PCS Ex. 229 at A04_05150, A04_05165]. The estimated cost for the approach using the stabilizer is \$8,778,221. [PCS Ex. 200 at Table 1]. In October 2008, Ashley proposed another remediation plan calling for the offsite disposal of the 9,500 cubic yards of contaminated soil that EPA had proposed to cap. [PCS Ex. 200 at 3; Trial Tr. 559:5-560:12, 702:4-704:11]. Under this proposal, contaminated soil will be

excavated on all of the parcels of land involved in this litigation. [Trial Tr. 673:19-674:4, 645:17-646:6, 650:24-651:16]. This plan also calls for the excavation of 13,670 cubic yards of ROC from the Site. [PCS Ex. 200 at Table 3 - Case 2]. Where the ROC is more than four inches deep, it would be “tested and evaluated for suitable onsite reuse.” [Ash. Ex. 194 at A04_04867; Trial Tr. 710:16-20, 805:2-20]. If it is contaminated with lead or arsenic above remediation levels, the stockpiled ROC will be disposed of off-site and replaced with clean fill. [Trial Tr. 1367:2-13]. The estimated cost of the approach involving offsite disposal of the 9,500 cubic yards of soil is \$8,021,240. [PCS Ex. 200 at Table 1].

C. Basis for Dividing up Remediation Costs

16. The cost of the remediation is directly related to the volume of contaminated soil on the Site. [Trial Tr. 701:6-11]. The predominant factors contributing to the cost of the cleanup are the amount of hazardous materials and the spread of these hazardous materials throughout the Site. [Ash. Ex. 162 at 12; Trial Tr. 812:6-11, 1587:9-15, 1943:11-15].
17. The majority of the remediation at the Site is necessary because of arsenic contamination. [Trial Tr. 660:3-8; 1900:9-11].
18. The spread of contamination occurs in several ways, including air dispersion, chemical migration, construction, demolition, earth moving, grading, and filling. Air dispersion is contamination spreading on the land surface due to wind activity. [Trial Tr. 1606:7-16, 1606:22-1607:2, 1607:8-12, 1608:1-7]. Chemical migration involves contamination moving through the soil when contaminants interact with the environment. For example, both lead and arsenic can move through the soil, particularly in low pH conditions, through chemical migration. [Trial Tr. 842:23-843:11]. Development activities engaged in by Site owners

including construction, demolition, earth moving, grading and filling can cause horizontal as well as vertical movement of contaminants. [Trial Tr. 791:7-18, 811:24-812:5, 1646:10-17; PCS Ex. 1 at 16].

D. Summary of Site Ownership

19. Ross, formerly known as Planters Fertilizer & Phosphate Company (“Planters”), was incorporated on May 15, 1906. [PCS Ex. 177]. Planters owned the Site from 1906 to June 30, 1966 and operated a phosphate fertilizer manufacturing facility on the Site during those years. [Ash. Ex. 162 at 1].
20. On October 1, 1962, CNC filed its Certificate of Incorporation in Delaware as Columbia Nitrogen Corporation. [Entry 118 ¶ 11]. On June 30, 1966, CNC purchased the Site from Ross. [Entry 118 ¶ 1, Ash. Ex. 23].
21. Between 1966 and 1972, CNC owned the Site and operated a fertilizer granulation plant on the Site. CNC produced superphosphate and N-P-K fertilizer (nitrogen-phosphatepotassium fertilizer). [Entry 118 ¶ 2]. In 1972, CNC ceased fertilizer production at the Site. [Entry 118 ¶ 3].
22. On February 7, 1985, CNC conveyed the Site to Susan M. Smythe (“Smythe”), as counsel to Holcombe and Fair, for the sum of \$588,168.00. [Entry 118 ¶ 5; Ash. Ex. 46]. Smythe took title to the property to facilitate a like-kind exchange for Holcombe and Fair. [Ash. Ex. 48; Trial Tr. 2861:11-2862:15]. On May 3, 1985, Smythe conveyed the Site to Donald J. Hyde (“Hyde”) for the sum of \$365,323.00. [Ash. Ex. 48]. On May 3, 1985, Hyde conveyed the Site to Holcombe and Fair for the sum of \$365,323.00. [Entry 118 ¶ 7; Ash. Ex. 49].
23. On December 29, 1987, Holcombe and Fair sold three acres of the Site to Max B. Mast and

- Marlene B. Mast (“the Masts”) for the sum of \$75,000.00. [Holcombe and Fair Parties Ex. 1; Trial Tr. 2593:2-10]. Subsequently, the Masts conveyed the same three acres of the Site to Allwaste by deed recorded on January 11, 1989. [Allwaste Ex. 1].
24. The City was deeded a right-of-way over 1.28 acres of the Site by quit-claim deed from Holcombe and Fair on September 30, 1991. [City Ex. 19]. On December 13, 1991, the City conveyed the turnaround at the end of the right-of-way to Holcombe and Fair by quit-claim deed. [Holcombe and Fair Parties Ex. 5; Trial Tr. 2658:7-2659:3].
 25. On January 15, 1992, Holcombe and Fair conveyed two acres of the Site to Robin W. Hood, II (“Hood”). [RHCE Ex. 2]. This parcel was then leased to RHCE for the purpose of conducting a business for the storage of intermodal shipping containers. RHCE continues to operate that business. [RHCE Exs. 5-7].
 26. On December 23, 1997, Holcombe conveyed his ownership of the Site to Holcombe Enterprises. [Entry 118 ¶ 8, PCS Ex. 72].
 27. On December 31, 2002, Holcombe Enterprises and Fair entered into a Contract of Sale with Ashley for the sale of the Holcombe and Fair Parties’ remaining property at the Site. [Ash. Ex. 94]. On November 24, 2003, Holcombe Enterprises, Fair, and Ashley amended the Contract of Sale by entering into the Fourth Amendment to the Contract of Sale. [Ash. Ex. 94; Trial Tr. 80:8-16]. On November 24, 2003, Holcombe Enterprises and Fair conveyed 27.62 acres of the Site to Ashley for the sum of \$2,700,000. [Ash. Exs. 94, 113; Entry 118 ¶ 9]. On May 15, 2008, Ashley acquired 2.99 acres of the Site from Allwaste. [Allwaste Ex. 1].
 28. Currently, Ashley owns 30.67 acres of the Site [Ash Exs. 194, 200], Hood owns 2.00 acres

of the Site [RHCEI Ex. 2], and the City holds an interest in 1.28 acres of the Site. [City Ex. 19].

E. Planters Period of Ownership (1906-1966) and Subsequent Actions by Ross

29. The only evidence introduced at trial about the Site for the period prior to 1906 was an historical map of Charleston, South Carolina from 1884. [Ash. Ex. 72 at A 001879]. On the 1884 map, the Site is referred to as W.H. Kinsman's. [Ash. Ex. 72 at A 001879]. The map shows that there were three structures on the western side of the Site in 1884. [Ash. Ex. 72 at A 001879]. It is unknown what uses were made of the Site prior to Planters' purchase of the Site in 1906.
30. Prior to the construction of the buildings and structures shown in a 1907 Planters brochure, the Site would have required grading and filling of the undeveloped surface at the locations of those structures. [PCS Exs. 4, 168].
31. To the extent fill containing pyrite waste was used on the Site prior to the construction of the manufacturing facilities first used by Planters in 1906, such fill came from an off-site source. Seven other phosphate fertilizer plants were in operation from 1884 to the early 1900's in close proximity to the Site, all of which are potential sources of contaminated fill. [Trial Tr. 1665:6-10, 1564:23-1565:3; Ash. Ex. 72 at A 001879-80, A 001882-84, A 001888].
32. Throughout its ownership period, Planters made phosphate fertilizer by reacting sulfuric acid with phosphate rock. [PCS Ex. 1 at 2]. Planters manufactured the sulfuric acid in acid chambers that were housed in an acid manufacturing plant on the northern part of the Site. [Ash. Ex. 226 at 6]. Once produced, the sulfuric acid was piped to a building on the southern part of the Site where it was added to crushed phosphate rock. [Ash. Ex. 226 at 5-7].

33. The chief fuel used by Planters until the early 1930's was pyrite, which led to the production of pyrite slag. [Ash. Ex. 76 at 2, 4; Ash. Ex. 162 at A 00857]. The pyrite slag was spread over the Site for road stabilization and used to line off-site roads in the area. [Ash. Ex. 76 at 2, 4; Ash. Ex. 81].
34. Planters is the only Site owner that burned pyrite ore and generated pyrite slag. [Trial Tr. 899:6-8, 1239:12-14, 1492:16-23]. Pyrite slag is the source of the vast majority of the arsenic and much of lead contamination at the Site. [Trial Tr. 637:2-4, 899:1-5, 1900:19-22].
35. One of the causes of the low pH at the Site is the pyrite slag from Planters' operations. [Trial Tr. 1461:8-22, 1492:22-1493:9; PCS Ex. 1 at 20-22]. Low pH is a condition often seen at phosphate fertilizer plant sites contaminated with slag. [Trial Tr. 1461:13-22, 1494:1-4]. The lowest pH on the Site is in the groundwater in the PZ-05 well cluster. [Trial Tr. 1461:8-22, 1494:10-23, 1496:10-1497:5]. The low pH and contamination in well cluster PZ-05 was caused by pyrite slag. [PCS Ex. 226 at I-30, I-33; PCS Ex. 217 at A01_01389; Trial Tr. 635:16-25, 636:8-10, 1888:25-1889:10].
36. The low pH conditions were also caused by acid discharges from the fertilizer operations, including acid rinsed out of the acid chambers, acid leaks from pipes, and discharges of fluorocyclic acid and hydrofluoric acid. [Trial Tr. 926:17-927:15, 1307:3-15]. If a leak occurred at night while Planters operated the Site, the leak would not be fixed immediately and the production process would not be halted. [O. Carter Dep. 163:17-165:1, Sept. 1, 2009]. The sulfuric acid plant operated "on automatic" during the evening shifts. [PCS Ex. 169 at 7].
37. There were five acid chambers at the Site, which were lined with lead. The use of these

chambers to make sulfuric acid resulted in the build up of lead sludge in the acid chambers. Three of these chambers were rinsed out every year and two were rinsed out every two to three years. [O. Carter Dep. 16:17-17:7, Sept. 1, 2009; PCS Ex. 169 at 6, PCS Ex. 170 at 6]. A hole was cut in the bottom of each of the chambers, and a fire hose was used to wash the sludge out of the chambers and onto the ground. [O. Carter Dep. 17:19-21, Sept. 1, 2009]. Fire hoses were then used to push the lead sludge into the marsh and the Ashley River. [O. Carter Dep. 23:2-23:17, Sept. 1, 2009; Benson Dep. 36:4-36:11, 45:24-46:22, Nov. 15, 2006]. “[V]ery little” soda ash was used by Planters to treat the lead acid sludge created in the acid-making process, and Planters did not test the sludge with litmus paper to determine whether it was neutralized. [O. Carter Dep. 160:23-161:4, Sept. 1, 2009]. However, the amount of lead contributed by these maintenance procedures was relatively minor. [Trial Tr. 1834:23-25, 1837:1-5, 1838:12-16; PCS Ex. 1 at 24].

38. Between 1945 and 1949, Planters built a repair shop southwest of the phosphate plant. [PCS Ex. 4 at 9, Figs. 1-4, 3-2]. Between 1949 and 1962, Planters made two additions to the repair shop, constructed a building southeast of the main fertilizer plant, built a shed east of the acid plant, added two buildings along the southern edge of the Site, and constructed a bulk storage building at the west end of the Site. [PCS Ex. 4 at 10-11, Figs. 3-4, 3-5, 3-10, 3-11; Trial Tr. 1995:13-20].
39. In 1963, there was a fire that destroyed a significant portion of the acid plant. [PCS Ex. 169 at 6; Trial Tr. 1995:5-9]. This fire was the source of the cPAHs at the Site. [Trial Tr. 856:3-7]. Planters constructed a new, modernized acid plant in 1964. [PCS Ex. 169 at 6; Trial Tr. 1995:5-9].

40. In 1965, as a result of fish kills in the Ashley River, the United States Public Health Service conducted an Ashley River Pollution Study. [Ash. Ex. 21 at 1]. In June and July 1965, water discharges into the Ashley River from a number of industrial sources, including Planters Fertilizer, were sampled and analyzed. [Ash. Ex. 21 at 2]. Two waste ditches leaving the Planters plant were sampled. [Ash. Ex. 21 at 4]. One was described as being process drainage and the other as roof drainage. [Ash. Ex. 21 at 4]. Two samples from the process ditch had “extremely low” pHs of 1.7 and less than zero. [Ash. Ex. 21 at 4].
41. In a Letter of Agreement dated January 6, 1966, Planters agreed to sell the Site to CNC and promised to indemnify CNC. [PCS Ex. 276]. The Indemnification provision states:

Seller [Planters] agrees to indemnify and hold harmless Buyer [CNC] in respect to all acts, suits, demands, assessments, proceedings and cost and expenses resulting from any acts or omission of the Seller [Planters] occurring prior to the closing date and pertaining herein, provided the Seller [Planters] receives prompt notice in writing of such claims or demand and Seller [Planters] shall have the right to litigate or contest such claim.
42. On June 30, 1966, the Planters plant and equipment were transferred from Planters to CNC by way of a Bill of Sale. [PCS Ex. 15]. The real estate on which the Plant was located was transferred by way of deed on the same date. [Ash. Ex 23].
43. The phosphate fertilizer industry was aware that the use of pyrite caused the release of lead and arsenic since at least 1924. [Trial Tr. 1953:22-1954:5].
44. Ross filed a Notice of Intent to Dissolve in 1983. [PCS Ex. 177; Ross Ex. 5].
45. The Board of Directors of Ross (“Ross Directors”) knew that the Site was contaminated at least as early as 1992 when an article appeared in a Charleston paper regarding the listing of

the Koppers Superfund Site on the National Priorities List. [Trial Tr. 2916:32-2917:12; PCS Ex. 261]. One of the Ross Directors, Katherine Rike (“Rike”), understood from the article that the entire Neck Area in Charleston, South Carolina, including the Site, was contaminated. [Trial Tr. 2916:32-2917:12]. Another director, Mr. Carter (“Carter”) clipped out the article and placed it in a file entitled “Special Directors Meeting.” [Trial Tr. 2984:20-2985:1]. On January 31, 1992, the Special Directors Meeting was held in part to discuss a potential environmental liability claim against Ross. [Trial Tr. 2981:21-2982:18]. At that meeting, Carter was authorized by the Ross Directors to consult with an environmental attorney. [Trial Tr. 2987:11-14].

46. A November 12, 1998 article about the Site that was published in the Charleston Post and Courier specifically addressed lead and arsenic contamination at the Planters facility. [PCS Ex. 262]. This article stated that the clean up could cost millions of dollars and that EPA had not yet determined “which former property owner would be responsible for the clean-up.” [PCS Ex. 262]. Following publication of the 1998 article, the Ross Directors held a meeting, and again discussed “possible environmental issues.” [PCS Ex. 263]. During that meeting three of the Ross Directors were authorized to discuss the matter with an environmental attorney. [PCS Ex. 263].
47. On January 28, 1999, Rike left a telephone message with Carter and another Ross Director. [PCS Ex. 264]. She stated that “her thoughts at this point are to completely drain all the accounts, particularly since there is a potential ‘threat’ from the environmental agency right now.” [PCS Ex. 264].
48. From 1996 through 2006, Ross sold real estate valued at about \$11,000,000 and transferred

- to its shareholders all proceeds from these sales not used to pay expenses. [PCS Ex. 181].
49. In 2004, Ross distributed \$1,832,019 to its shareholders. [PCS Ex. 181 at 15]. In 2005, Ross distributed \$916,010 to its shareholders. [PCS Ex. 181 at 15]. In 2006, Ross distributed \$694,991 to its shareholders. [PCS Ex. 181 at 5].
50. In July 2006, Mr. Carter advised the Ross shareholders that the distribution being made at that time might have to be returned to a creditor making a claim within ten years of Ross's dissolution. [PCS Ex. 181 at 1].
51. Ross filed its Articles of Dissolution on September 13, 2006. [PCS Ex. 177; Ross Ex. 6].
52. Rike has acknowledged that she was aware of PCS's claim against Ross in November 2006. [Trial Tr. 2932:3-5].
53. The Ross Directors made a final distribution of \$35,439 to its shareholders on December 13, 2006. [Trial Tr. 2932:6-2933:18]. The Ross Directors were themselves Ross shareholders who received payments upon authorizing distributions. [PCS Ex. 181].
54. Ross has filed a declaratory judgment action in South Carolina state court against Fireman's Fund Insurance Company and United States Fire Company, both of which have denied Ross insurance coverage for any liability related to the contamination at the Site. [PCS Ex. 183]; *see Ross Dev. Corp. v. Fireman's Fund Ins. Co.*, 2008-CP-10-5524. This case was subsequently removed to federal court. *Ross Dev. Corp. v. Fireman's Fund Ins. Co.*, 2:08-CV-03672-MBS.

F. CNC Period of Ownership (1966-1987)

55. CNC owned the Site from 1966 to 1985. PCS operated the acid plant at the Site until June 1970 and operated the fertilizer plant until 1972. [PCS Ex. 1 at 3; PCS Ex. 15; PCS Ex. 175]

- at DSMNV-000585].
56. Arsenic and lead were present in CNC's finished product, normal superphosphate fertilizer. [Ash. Ex. 41 at 75]. Dust generated by the manufacture of this product contained elevated lead and arsenic, which was deposited on the Site. [Trial Tr. 1303:7-1304:8, 1347:20-24].
57. Arsenic was present in the raw phosphate ore from Florida used by CNC in its manufacturing processes, but much less arsenic was released when the phosphate rock was burned than when pyrite was burned by Planters. [Trial Tr. 1299:7-10, 1299:18-22, 1407:19-24, 1958:25-1959:2, 1959:7-9, 1959:18-25; Ash. Ex. 41; Ash. Ex. 29 at 7 PCS-0006210].
58. CNC never used pyrite ore to manufacture sulfuric acid and generated no pyrite slag. [Trial Tr. 1492:21-23, 1524:12-13].
59. Lead was also present in the raw phosphate ore used by CNC in its manufacturing processes. [Trial Tr. 1299:7-10, 1299:18-22, 1407:19-24, 1958:25-1959:2, 1959:7-9, 1959:18-25; Ash. Ex. 41; Ash. Ex. 29 at 7].
60. Every summer CNC closed the acid plant for three months for plant maintenance. Of the five acid chambers, three were washed out every year, and two were washed out every two years. CNC personnel washed lead sludge that built up in the acid chambers from a four by six inch hole cut into the bottom of each chamber onto the ground. [O. Carter Dep. 22:13-22, Sept. 1, 2009]. This wash out resulted in a pyramid of sludge under each chamber that was two feet wide and two to three feet high. [O. Carter Dep. 22:13-22, Sept. 1, 2009]. Each pyramid of sludge was then hosed with a 225 foot long fire hose into an unlined ditch that ran toward the Ashley River. [O. Carter Dep. 102:25-103:12, Sept. 1, 2009]. The sludge then migrated towards the Ashley River. [O. Carter Dep. 15:24-26:11, 77:20-78:24,

89:17-105:19, Sept. 1, 2009; Trial Tr. 1842:3; Ash. Ex. 272 at 3-4, Figs. S-7, S-8; Ash. Ex. 41 at ii, A04_04337; Ash. Ex. 72 at 4, A001881; Ash. Ex. 150 at 1; Ash. Ex. 91 at 2, 6-63; Ash. Ex. 93 at A01_06704]. The sludge washed out of the acid chambers was a mixture containing lead sulfate, which was in part comprised of lead and acid. [Trial Tr. 831:9-22].

61. In addition, during periodic repairs to the lead acid chambers, pieces of lead were cut out and discarded onto the ground. From 1969 to 1971, the used lead was “just thrown and left laying around.” [2007 Trial Tr. 90:20-22, 93:16-20, 104:4-14]. In conducting a Site inspection during the Phase I Remedial Investigation, EPA contractor Black and Veatch Special Projects Corp. (“Black and Veatch”) noted that the site was “littered with . . . sheets of lead lining from the lead acid chambers.” [Ash. Ex. 87 at 9]. Lead sheets were seen on the ground by EPA in the 1990’s. [Ash. Ex. 93 at 1-8]. If lead sheets were left on the surface of the ground from the time of the acid plant demolition in 1972, they could have contributed to the contamination at the Site. [Trial Tr. 1653:1-9].
62. The onsite manufacturing processes generated liquid process effluent that contained fluorosilicic acid and lead that was discharged into drainage ditches, releasing these contaminants across the Site and into the marsh and the Ashley River. [Ash. Ex. 228 at 4]. Fumes containing fluorosilicic acid were released into the air to be deposited onsite by prevailing winds. [PCS Ex. 1 at 5-6 & n.2; Ash. Ex. 21 at 1].
63. After CNC purchased the plant, two new environmental practices were implemented by CNC’s environmental manager Herbert Respass (“Respass”). [Trial Tr. 1481:2-12, 1850:1-15]. First, during the periodic maintenance of the acid chambers, maintenance workers would enter the acid chambers and treat the acidic lead sludge with four to five hundred

pounds of soda ash. [O. Carter Dep. 37:14-17, 20:1-6, Sept. 1, 2009]. After the treated sludge rested for twenty-four hours, the tanks were drained and another four to five hundred pounds of soda ash were mixed into the lead sludge. [O. Carter Dep. 17:12-21, 21:2-22:13, Sept. 1, 2009]. Before the lead sludge was washed away, it was tested with litmus paper to confirm that it had been neutralized. [O. Carter Dep. 160:6-18, Sept. 1, 2009]. Second, CNC implemented new procedures not used by Planters to address acid leaks from pipes. When pipes leaked, Carter was called to address the problem immediately and if he was not available, the plant was shut down. [O. Carter Dep. 163:17-165:1, Sept. 1, 2009]. When a leak was discovered, it was treated with soda ash. [O. Carter Dep. 29:20-30:4, Sept. 1, 2009; Trial Tr. 875:18-878:3, 882:16-21, 883:5-15]. As a result, CNC shut down the plant more frequently than Planters did for maintenance. [O. Carter Dep. 28:20-29:12, Sept. 1, 2009]. CNC also shut down the plant on occasion to minimize air emissions from the plant. [PCS Ex. 175 at DSMNV-000609].

64. Site data show that lead sulfate was released from the acid lines. These acid releases created conditions that allowed redistribution of lead and arsenic through natural processes including chemical migration, leaching, and chemical dissolution followed by re-precipitation. Over time, periodic releases of acid, either from the washing out of the lead chambers or acid spills from line leaks and tank leaks, mobilized both lead and arsenic through the soil. [Trial Tr. 831:9-22, 840:13-16, 842:23-843:7].
65. During 1968 and 1969, CNC spent over \$200,000 to construct a new granulation plant. [Ash. Ex. 26 at 3]. CNC dismantled existing components of the old granulation plant and moved them to a new structure. [Ash. Ex. 26 at 2]. New construction involved over 120 tons of

- steel, creating heavier foundations and running over 4,500 feet of new underground piping, including 500 feet of piping from the acid plant to the new granulation plant. [Ash. Ex. 26 at 14,15, 21; Ash. Ex. 28 at 1, 14-15].
66. In 1969, the old granulation plant was converted to storage, which required the construction of concrete ramps, the removal of old equipment, and the replacement of support columns. [Ash. Ex. 26 at 15]. Two stories of the old granulation plant were removed and the roof replaced. [Ash. Ex. 26 at 15].
67. In May of 1970, CNC reported that the acid plant was “in poor repair.” [PCS Ex. 1 at 5-6 & n.2; Ash. Ex. 26 at 1; Ash. Ex. 30 at 3].
68. During CNC’s ownership of the Site, material was brought onto the Site and used as fill. Locations at which fill material was placed are contaminated and require remediation. [Ash. Ex. 226 at 11, 18; Ash. Ex. 229 at 23, 26].
69. On April 23, 1971, a severe wind storm caused extensive damage to the roof of the sulfuric acid plant, the main building, and the plant protection chemicals storage building. [Ash. Ex. 32 at 6]. Estimated loss amounted to \$45,000 to buildings, \$28,000 to fertilizer, and \$20,000 to chemicals. [Ash. Ex. 32 at 6]. This damage resulted in air dispersion of contaminated roof dust, the finished fertilizer product, and chemicals.
70. The acid plant was not repaired after this event. Demolition of the plant began in 1971 and was completed by February 28, 1972. [Ash. Ex. 32 at 6; Ash. Ex. 33 at 4; Trial Tr. 1667:24-1668:1]. Demolition involved dismantling and washing out the acid chambers and acid towers, and excavating the acid tank and associated piping. Heavy equipment would have been required to demolish and remove the structures, and to remove the pilings on

which the structure was built. Demolition of the plant would have disturbed the subsurface soil to a depth of at least two feet. [Ash. Ex. 272 at 2, Figure S-1; Trial Tr. 2561:4-19, 2564:20-2565:1]. Underground piping was dug out with an excavator by digging a trench right over the pipe or next to it and removing the pipe to a staging area. [Trial Tr. 2561:4-2562:6].

71. By July 1972, the dismantling of all acid plant equipment was nearly complete. [Ash. Ex. 37 at 4]. By October of 1972, all fertilizer production at the Site had ceased. [Ash. Ex. 226 at 13; Ash. Ex. 37 at 4]. Between 1972 and 1977, the Site was inactive. [PCS Ex. 4 at 13-14]. An April 1973 aerial photograph indicates that the roof on the old granulation plant had collapsed. [PCS Ex. 4, Figs. 3-25; 3-33].
72. Between February and September of 1977, CNC dismantled most of the remaining structures on the Site. [Trial Tr. 2005:23-25]. The dismantling of the acid and fertilizer plants left wooden timbers and poles on the Site from late 1977 until 1979. [Trial Tr. 2072:1-10; PCS Ex. 4 at 14-15].
73. In April 1979, CNC's demolition contractor defaulted on his contract and walked off the Site leaving "a lot of rubble and some very difficult concrete structures to remove." [Ash. Ex. 40]. Access to the Site was not secure; fencing was down and a gate left open. [Ash. Ex. 40].
74. By January 11, 1981 the demolition of the fertilizer plant was completed. [Ash. Ex. 33 at 4; Ash. Ex. 40 at 1; PCS Ex. 4 at 15]. Demolition of the fertilizer plant required the use of substantial heavy equipment, such as large hydraulic excavators, a crane with a wrecking ball, front-end loaders, and bulldozers. [Trial Tr. 2556:19-2557:16]. Demolishing the large plants on the Site required using an area around the buildings to position the equipment and

to place pieces of the demolished building. [Trial Tr. 2558:9-2559:14]. In addition, grading was likely required to expand site access and prepare an area for staging. [Trial Tr. 2558:9-2559:14]. These processes disturbed the soil. [Trial Tr. 2564:20-2565:1].

75. The removal of three separate railroad tracks on the Site, including portions elevated on trussle-type structures, would have required the use of heavy excavation equipment to dig out the tracks. [Trial Tr. 2560:13-2561:3]. The piles would either be pulled out or broken off with a bulldozer, disturbing the soil. [Trial Tr. 2560:13-2561:3].
76. After demolition activities were completed, CNC did not implement a storm water management system on the Site. By early 1981, most of the debris from the demolition process had been removed. [PCS Ex. 4 at 15; Ash. Ex. 272 at 3, fig. S-5].
77. The CNC demolition and site preparation activities that occurred in the 1971-1981 time period impacted an area a little less than eighty percent of the area where contaminated soils and sediments must be excavated. [Trial Tr. 1047:5-17]. Demolition and regrading of the Site by CNC significantly disturbed the soil at the Site. [Trial Tr. 939:2-6].
78. CNC operated three phosphate fertilizer plants located in: Charleston, South Carolina; Moultrie, Georgia; and Macon, Georgia. [Ash. Exs. 31-38]. According to the testimony of Thomas Blue, a PCS environmental expert who testified at the first trial, a company with expertise in the manufacturing of phosphate fertilizer would be aware that these processes result in lead and arsenic contamination. [2007 Trial Tr. 364:24-366:17]. If pyrite clinkers and pyrite slag were on the land surface of the Site, a person with expertise in the phosphate fertilizer business would know that lead and arsenic contamination were being released. [Trial Tr. 1600:2-1601:2]. CNC employed more stringent environmental practices at its

phosphate fertilizer plant in Moultrie, Georgia than in Charleston, South Carolina. In Moultrie the lead sludge from the lead acid chambers was washed into a retention basin lined with calcitic lime rock, whereas in Charleston the lead sludge was washed onto the ground, sprinkled with soda ash, and then washed away with a fire hose. [O. Carter Dep. 74:21-75:3, 93:9-22, September 1, 2009]. The foregoing indicates that CNC knew that hazardous materials had been disposed of on the Site.

79. CNC continued to own the Site until 1985, roughly five years after CERCLA was enacted. CNC did not report any release of hazardous substances at the Site to EPA. [Ash. Ex. 258].
80. Prior to the purchase of the Site by Holcombe and Fair in 1985, all of the structures on the Site were demolished and “some grading of portions of the Site took place.” [Trial Tr. 2565:17-2566:2; Ash. Ex. 258 at 5].
81. CNC did not disclose the presence of contamination on the Site to Holcombe and Fair prior to the sale of the Site. [Ash. Ex. 47; Trial Tr. 2863:24-2864:12].

G. Holcombe and Fair Parties Ownership (1987-2003)

82. In November of 1984, Holcombe and Fair, and CNC executed an agreement for the sale of approximately thirty-nine acres of the Site. [PCS Ex. 58; Trial Tr. 2580:20-21].
83. Holcombe and Fair were represented by Smythe, a real estate lawyer. [Trial Tr. 311:18-19, 2584:3-4, 2861:5-14].
84. On December 11, 1984, William Bivens (“Bivens”), counsel to CNC, sent Fair a letter enclosing the results of a soil sampling performed in 1968. [Ash. Ex. 44]. This soil sampling was performed for the purpose of assessing the suitability of the soil for construction purposes and did not assess the environmental condition of the soil. [Ash. Ex.

- 44; Trial Tr. 2585:2-2587:11].
85. Prior to consummating the sale of the property, Holcombe and Fair agreed to sell a portion of the property to the Commissioner of Public Works for the City and agreed to enter into a like-kind exchange of property with Hyde. [Trial Tr. 2583:14-2584:5, 2861:3-2863:13].
86. On January 4, 1985, Bivens sent Fair a letter describing an agreement between CNC and the City whereby the City planned to extend Milford Street and water and sewer utilities onto the Site. [PCS Ex. 59]. In this letter CNC offered to assign its rights under the agreement with the City to Holcombe and Fair. [PCS Ex. 59]. Fair understood this letter to mean that the City would pay to extend Milford Street and the utility lines. [Trial Tr. 2581:6-2582:18].
87. On February 7, 1985, CNC conveyed the Site to Smythe, as counsel to Holcombe and Fair, for the sum of \$588,168.00. [Entry 118 ¶ 5; Ash. Ex. 46]. Smythe then conveyed six acres of the property she received from Columbia Nitrogen to the Commissioner of Public Works. [Trial Tr. 2584:2-5, 2861:3-2863:13]. On May 3, 1985, Smythe conveyed the remainder of the land at the Site to Hyde for the sum of \$365,323.00. [Entry 118 ¶ 6; Ash. Ex. 48; Trial Tr. 2861:11-2862:15]. That same day, Hyde conveyed the property to Holcombe and Fair. [Entry 118 ¶ 7]. Holcombe and Fair, in turn, conveyed another property to Hyde through Smythe. [Ash. Ex. 49; Ash. Ex. 50; PCS Ex. 66; Trial Tr. 311:5-17, 313:11-314:3, 2583:14-2584:11, 2861:3-2863:13]. Holcombe and Fair did not have knowledge of environmental contamination at the time of the like-kind exchange. [Trial Tr. 2584:11-2585:10, 2863:24- 2864:12; Ash. Ex. 47].
88. No environmental site assessment was conducted by Holcombe and Fair prior to purchase because it was not customary at the time for purchasers of commercial property to investigate

- the property's environmental condition. [Entry 528 at 5:23-6:12, Ex. 1; Trial Tr. 310:4-311:1, 471:16-474:18, 2588:20-2589:5, 2793:4-2794:12, 2868:24-2870:9, 2885:10-16; Entry 527 at 16:5-17:21, 18:16-22, 22:2-9, Ex. 1; Holcombe and Fair Parties Ex. 13].
89. When the Site was acquired by Holcombe and Fair, it was in a condition that did not require rough grading or the removal of buildings. [Trial Tr. 434:11-17, 2496:6-25, 2498:1-2499:7, 2685:6-14, 2699:1-18, 2801:25-2802:7]. Witnesses who observed the Site at the time described the land as relatively flat, with some vegetation, but no trees. [Trial Tr. 434:11-17, 2496:6-25, 2498:1-2499:7, 2685:6-14, 2699:1-18, 2801:25-2802:7].
90. On December 29, 1987, Holcombe and Fair conveyed three acres of the Site to the Masts by deed for the sum of \$75,000.00. [Holcombe and Fair Parties Ex. 1, Trial Tr. 2593:2-10]. Holcombe and Fair did not perform any site work or construction on this parcel prior to its sale to the Masts. [Trial Tr. 2593:2-10].
91. Holcombe and Fair intended to divide their property up into parcels for lease. [Trial Tr. 2494:12-2495:3, 2590:3-9, 2598:7-25, 2681:23-2682:7, 2695:6-2698:14].
92. In the summer of 1990, Holcombe and Fair began constructing the Milford Street extension. [Trial Tr. 2796:1-19]. Holcombe and Fair paid for the extension of Milford Street. [Trial Tr. 2656:10-2557:9]. The City did not contribute to the payment of these expenses. E.M. Seabrook Jr., Inc., a local engineering and surveying company, was hired by Holcombe and Fair to plan and construct the Milford Street extension. [Trial Tr. 2598:13-22, 2682, 2687:6-8]. The construction for the Milford Street extension included the addition of underground water and sewer lines as well as a drainage ditch. [Trial Tr. 2494:12-2495:3, 2582:19-22, 2598:7-25, 2681:23-2682:7, 2685:6-18, 2695:6-2698:14]. These plans were

approved by the South Carolina Coastal Council. [PCS Exs. 79, 80, 83, 84, 155, 157, 165; Holcombe and Fair Parties Ex. 2].

93. To construct the Milford Street extension, Seabrook used a bulldozer to level and smooth the land. [Trial Tr. 1128:17-1129:6, 2694:14-2696:3, 2699:1-18; PCS Ex. 157]. By the end of the summer of 1990, the Milford Street extension was roughed in. [Trial Tr. 2796:1-19]. ROC was put down as base material with asphalt placed on top. [Trial Tr. 1128:17-1129:6, 2494:12-2495:22, 2694:14-2696:3, 2699:1-18; PCS Ex. 157]. A turnaround was constructed at the end of the road extension, but was left unpaved. [PCS Ex. 157; Trial Tr. 2686:12-25, 2780:5-8]. The water and sewer utility extensions were constructed by excavating soil adjacent to the road extension, placing utility pipe in the excavated trench, backfilling the trench with soil removed from the trench, and spreading any excess dirt in the immediate area of the excavation. [PCS Ex. 157; Trial Tr. 2696:4-2697:2]. The water line extension was placed on one of the road shoulders at an elevation of approximately three feet deep. [Trial Tr. 2731:15-16]. The sewer line was placed on the other road shoulder at a depth of 4.5 feet. [Trial Tr. 2731:2-14]. A drainage ditch approximately two feet in depth and ten feet wide was constructed along the road extension and along the turnaround. [PCS Ex. 157; PCS Ex. 166 at PCS-0016120; City Ex. 17 at 6; Trial Tr. 2686:12-25, 2697:3-12, 2746:23-2747:22]. The final portions of the water and sewer lines were installed in 1996. [PCS Ex. 259 at HF0001249; PCS Ex. 101]. The construction of the road, ditch, and utility lines proceeded through areas with discolored soils. [PCS Ex. 126; Trial Tr. 422:6-9, 2800:18-25].
94. The asphalt on the Milford Street extension acted as a cap, preventing further environmental

- harm, and the addition of water and sewer prevented the use of contaminated groundwater, protecting human health. [Trial Tr. 439:15-440:3, 445:7-12, 479:15-22, 480:3-14, 1731:2-1732:6].
95. In mid-1990, Charles Lane (“Lane”), a real estate professional working at Holcombe and Fair Realtors, recommended that Holcombe and Fair conduct an environmental assessment of the Site before leasing or selling portions of the property. [Trial Tr. 2491:8-2492:6, 2589:9-15].
96. On July 31, 1990, Lane sent a letter to Tom Hutto (“Hutto”) of General Engineering Laboratories, Inc. (“GEL”) requesting an environmental investigation of the property “to the minimum extent necessary to show due diligence.” [PCS Ex. 124].
97. Subsequently, Scott Smith (“Smith”) and Hutto of GEL performed an environmental assessment of the property that included a review of historical information, interviews, and soil sampling and testing. [Ash. Ex. 53; PCS Ex. 126-127; Trial Tr. 314:1-323:12, 487:15-493:5, 2795:9-2802:13].
98. Hutto and Smith performed a visual inspection of the Site in the summer of 1990. [Trial Tr. 2795:1-17, 2797:13-20; PCS Ex. 126]. During this visual inspection, Smith noted a pile of material near the road construction that he believed was soil and building debris. [Trial Tr. 2800:6-15]. He did not sample this material. [Trial Tr. 2801:5-24]. Smith also noted the presence of discolored soils along the edge of the Milford Street extension and to the west of the turnaround. [PCS Ex. 126; Trial Tr. 2797:21-2798:2]. These discolored soils included a purple slag-like material. [Trial Tr. 2815:9-14]. Hutto observed waste materials spread across the land surface during the inspection. [Trial Tr. 510:23-511:8].
99. On October 3, 1990, a draft report of GEL’s investigation was sent to Lane. [Ash. Ex. 53;

Trial Tr. 317:6-16, 496:12-497-6, 2493:8-16]. The report detailed the analytical results from several samples taken from sixteen on-site test pits that were seven to ten feet deep. [Ash. Ex. 53; Trial Tr. 320:5-321:1]. The results showed elevated metals, including lead and arsenic, and low pH conditions in several of the samples. [Ash. Ex. 53; Trial Tr. 316:10-323:24]. These results were not reported to DHEC because samples from test pits are not required to be reported. [Trial Tr. 489:16-490:5, 2838:12-14, 2839:5-11]. The draft report indicated the presence a gray material that is considered characteristically hazardous as well as a purple slag material that is not considered characteristically hazardous. [PCS Ex.127 at 2-3].

100. On October 4, 1990, Smith faxed a copy of the draft report to Smythe. [PCS Ex. 128].
101. On December 12, 1990, Elizabeth Warner (“Warner”), an attorney representing Holcombe and Fair, sent a copy of the GEL draft report to an attorney at Arcadian Corporation, successor to CNC, and predecessor to PCS. [Ash. Ex. 55; PCS Ex. 129; Entry 118 at 8, 22]. Warner’s letter indicated that GEL’s investigation of the Site revealed “significant contamination” involving phosphates and petroleum products. [PCS Ex. 129].
102. Ross was never contacted by the Holcombe and Fair Parties regarding the contamination or clean up costs despite Holcombe’s knowledge that the Site had been owned by Planters. [Trial Tr. 2632:1-4, 2880:23-2881:60; PCS Ex. 56].
103. GEL’s final report on its subsurface investigation concluded that there were “materials in the subsurface which are characteristically hazardous.” [PCS Ex. 132]. Contamination was found at depths ranging from one and one half to eight feet below the land surface. [PCS Exs. 127, 132]. The final report also indicated that storm water presented a problem at the

Site because it could carry contaminants that were on the land surface to the marsh and tidal pool at the western edge of the Site. [PCS Exs. 127, 132; Trial Tr. 2820:18-2821:21, 2822:18-25].

104. Holcombe and Fair did not commission further soil sampling or analysis after the GEL report [Trial Tr. 411:6-8, 2629:21-2630:22, 2837:6-16], despite GEL's statement that additional sampling was appropriate. [PCS Exs. 127, 132].
105. On December 29, 1990, Holcombe and Fair entered into a Contract of Sale with RHCE for three acres of land at the Site. [Holcombe and Fair Parties Ex. 3 at 3; Trial Tr. 2594:4-2597:8]. The Purchase and Sale Agreement stated, "There is no contamination on the property at the time [RHCE] takes over the property, except as outlined in GEL letter dated December 20, 1990." [PCS Ex. 131]. The December 20, 1990 letter did not mention contamination on the Site besides that found on tracts one and two. [Trial Tr. 2836:3-21]. The letter mentioned the purple slag, but did not mention the gray characteristically hazardous material described in the draft report. [PCS Ex. 130]. The GEL letter indicated that the presence of contamination should not affect the use of the property for the purpose parking commercial vehicles on six inches of ROC. [PCS Ex. 130 at 2].
106. On January 23, 1991, an attorney for Arcadian Corporation responded to Warner's letter regarding the contamination at the Site denying responsibility. [Ash. Ex. 56]. Arcadian subsequently provided EPA with a copy of GEL's draft report. [Ash. Ex. 62].
107. On May 22, 1991, Holcombe faxed additional information to Hood regarding the environmental condition of the property. [PCS Ex. 186; Trial Tr. 2594:25-2596:5]. The fax, which summarizes the findings of a July 22, 1987 environmental audit of the Site by the

- Commissioner of Public Works, indicates that the contaminants in the soil did not significantly impact the surface soils or the groundwater on the Site and that current Site activities were not exacerbating the contamination of the property. [PCS Ex. 186 at 5].
108. On May 29, 1991, the Holcombe and Fair Parties commissioned GEL to analyze the groundwater at the Site. [PCS Ex. 133].
109. In July of 1991, GEL conducted groundwater sampling and analysis at the Site. [Ash. Ex. 59; PCS Exs. 134, 136]. In conducting this analysis, GEL took samples from a well not owned by Holcombe and Fair. [PCS Ex. 133; Trial Tr. 2806:5-12, 2838:7-25]. Because the well was owned by another entity, the test results from this sampling were not required to be reported to DHEC. [PCS Ex. 133; Trial Tr. 2806:5-12, 2838:7-25]. The results of the analysis were provided to Holcombe, who forwarded the information to Hood on July 3, 1991. [Ash. Ex. 59; PCS Exs. 134-137]. The results revealed low pH conditions [Trial Tr. 417:7-12] and that the groundwater at the Site failed to meet South Carolina groundwater standards for levels of nitrates as well as the secondary standard for sulfates. [PCS Ex. 134]. The report, however, stated that the groundwater results should not affect Holcombe and Fair's intended use of the property to park commercial vehicles and containers. [Ash. Ex. 59; Trial Tr. 2806:19-2807:16].
110. On September 30, 1991, the Holcombe and Fair Parties deeded the Milford Street extension, which covers 1.28 acres of the Site, to the City by quitclaim deed. [City Ex. 19].
111. On December 13, 1991, the City conveyed the land from the turnaround at the end of the Milford Street extension back to Holcombe and Fair by quit-claim deed. [Holcombe and Fair Parties Ex. 5; Trial Tr. at 2658:7-2659:3]. The deed to the Milford Street extension was

- recorded on December 19, 1991. [City Ex. 19].
112. Prior to leasing out parcels of the Site, Holcombe and Fair prepared each parcel by removing vegetation, filling any low spots, and putting down a four to six inch layer of ROC. [Trial Tr. 2496:6-2500:13, 2600:1-12, 2600:24-2601:1, 2697:13-2699:18]. The contractor performing the site preparation work encountered concrete and steel rods. In order to prevent breaking the equipment, the contractor stopped using a bushog and used a bulldozer to clear vegetation. [Trial Tr. 2496, 2499, 2632:19-2633:11]. Site preparation was conducted over approximately six years as leases were signed for the use of different parcels. [Trial Tr. 1174:7-24, 2495:23-2496:5, 2697:13- 2698:2; Ash. Ex. 229]. Portions of the Site were graded, proof rolled and cleared as late as 1998. [PCS Exs. 105-106].
113. Development of the parcels by Holcombe and Fair occurred on contaminated soils. [Ash. Ex. 194, drawings 1-6].
114. On January 15, 1992, Holcombe and Fair conveyed two acres of the Site to Hood. [RHCE Ex. 2]. This parcel was then leased to RHCE, for the purpose of conducting a business for the storage of intermodal shipping containers on the parcel. [RHCE Exs. 5-7]. RHCE continues to operate its intermodal shipping container storage business. [RHCE Exs. 5-7].
115. Between February 1992 and May 1993, Holcombe and Fair placed ROC on the first parcel of land that it leased. [Ash. Ex. 229 at 29-32; Trial Tr. 1192:13-1197:7, 2026:19-2030:9; PCS Ex 4, Figs. 3-62 – 3-67].
116. Holcombe and Fair were required to have a master drainage plan for the Site approved by DHEC before they developed the Site. [Trial Tr. 2688:20-24; PCS Exs. 96; 97]. In 1992, Seabrook worked with DHEC to develop such a plan. [PCS Exs. 96-99]. The resultant plan

- involved the construction of four detention ponds. [PCS Ex. 4 at 17-18, Fig. 4-1; PCS Ex. 99; PCS Ex. 142; PCS Ex. 144].
117. On February 5, 1993, EPA sent a letter to Holcombe and Fair requesting access to their property in order to conduct environmental assessment activities related to the neighboring Koppers facility. Holcombe and Fair granted access. [PCS Ex. 74; Trial Tr. 2602:13-25].
118. Holcombe and Fair placed ROC on the second leased parcel in February of 1994. [Ash. Ex. 229 at 29-32; PCS Ex 4, Fig. 3-62 – 3-67; Trial Tr. 1192:13-1197:7, 2026:19-2030:9].
119. In 1995, EPA requested access to the Site to conduct environmental assessment activities, which Holcombe and Fair granted. [PCS Ex. 75; Trial Tr. 2603:1-18].
120. On July 12, 1995, EPA project manager Craig Zeller (“Zeller”) sent the results of EPA’s preliminary assessment to Hutto as representative of Holcombe and Fair. [Ash. Ex. 68; PCS Ex. 140; Trial Tr. 324:8-325:9].
121. In April of 1997, Holcombe and Fair placed ROC on a third leased parcel. [Ash. Ex. 229 at 29-32; Trial Tr. 1192:13-1197:7, 2026:19-2030:9; PCS Ex 4, Fig. 3-62 – 3-67].
122. On December 17, 1997, Holcombe formed Holcombe Enterprises. [PCS Third-Party Complaint ¶81; Holcombe and Fair Parties Answer ¶3]. On December 23, 1997, Holcombe conveyed his ownership of the Site to Holcombe Enterprises. [Entry 118 ¶ 8; PCS Ex. 72].
123. In August 1998, an Expanded Site Inspection was performed for EPA by DHEC. The Expanded Site Inspection indicated that contamination existed at the Site, including elevated levels of arsenic, lead, and mercury. [Ash. Exs. 81, 162].
124. On November 5, 1998, Zeller, EPA project manager, contacted Hutto about the Site. [Ash. Ex. 77]. Zeller’s letter indicates that future remedial actions would be necessary to

adequately protect human health and the environment from the contamination at the Site. [Ash. Ex. 77]. The letter further indicates that EPA's greatest concern at the time was surface water runoff. [Ash. Ex. 77]. On or about November 12, 1998, Zeller met with Holcombe, Fair, and Hutto to discuss a surface water management plan. [Ash. Ex. 77; Trial Tr. 2605:1-2606:8, 337:8-338:25]. To avoid an EPA Removal Action, the Holcombe and Fair Parties agreed that they would: 1) develop a comprehensive surface water management plan; 2) submit the plan to EPA; and 3) upon approval of the plan, complete the required work. [PCS Ex. 144].

125. As previously found in Paragraph 115, in 1992 Seabrook had designed four storm water detention ponds to control surface water runoff at the Site after the placement of the ROC. Coastal Council regulations required that the post-development rate of surface water runoff not exceed the pre-construction development rate of surface water runoff. [Trial Tr. 2599:18-25, 2685:15-22, 2699:19-2702:11; Holcombe and Fair Parties Exs. 10a-10b; PCS Ex. 157]. Seabrook first learned about the contamination at the Site in 1998 while working with EPA to design a plan to control runoff. [Trial Tr. 2715:13-24].
126. On December 4, 1998, Holcombe and Fair wrote to Zeller that they had begun work on the detention ponds in response to his request. [Holcombe and Fair Parties Ex. 10; PCS Exs. 142, 144; Trial Tr. 423:4-424:1, 2606:9-2608:10]. The Holcombe and Fair Parties did not submit the plan for approval from EPA prior to beginning the work. [PCS Ex. 144]. The plan did not "[m]eet the substantive requirements for a NPL-Caliber site." [PCS Ex. 144 at A09_00400]. The Holcombe and Fair Parties' implementation of the plan destroyed wetlands along the Ashley River. [PCS Ex. 148 at HF000288]. EPA told the Holcombe and

Fair Parties that by proceeding without oversight they failed to follow “protocols” for work in “coastal/critical areas.” [PCS Ex. 144 at A09_00400].

127. DHEC approved the construction of ponds on the Site, “unaware of the serious contamination issues related to past uses in this area.” [PCS Ex. 143]. When DHEC learned about the Site contamination in 1999, DHEC determined that the construction of the ponds might not have been appropriate. [Trial Tr. 2710:15-20; PCS Exs. 143, 145].
128. Only three of the four ponds were built. [PCS Ex. 4, Figure 4-1; Trial Tr. 2709:5-9]. The fourth pond was not built because the area around it was not developed and no ROC was put down. [Trial Tr. at 2709:1-17]. The ponds were constructed by excavating dirt in the footprint of the pond and using the excavated dirt to form embankment walls. [Trial Tr. 2601:19-24, 2703:12-24].
129. The Holcombe and Fair Parties did not maintain the three detention ponds that were constructed, as evidenced by DHEC’s inability to locate the ponds during a 1998 inspection because they were overgrown. [PCS Exs. 98, 145, 148; Trial Tr. 2737:6-8, 2737:12-23].
130. In 1998 and early 1999, the Holcombe and Fair Parties put down additional ROC on the property and relocated one of the detention ponds. [Trial Tr. 2608:11-2609:13, 2710:18-2712:4]. In March 1999, DHEC’s Department of Ocean and Coastal Resource Management (“OCRM”) expressed concern to the Holcombe and Fair Parties that the detention pond had been relocated was now seaward of the coastal area critical line established by OCRM. [Holcombe and Fair Parties Ex. 11; Trial Tr. 2608:13-7, 2717:17-23]. The relocation of the detention pond seaward of the OCRM critical line was inadvertent because a new critical line had been established. [Trial Tr. 2609:2-21, 2717:17-2719:13;

PCS Ex. 154]. As a result of OCRM's concern, the relocated detention pond was filled back in. [Trial Tr. at 2721:2-4]. Seabrook determined that another detention pond did not need to be constructed because his calculations showed that the ditch at the end of the road extension was adequate to serve the need for storm water retention. [Trial Tr. 2717:24-2721:4].

131. Aerial photography taken in March of 1999 shows ROC covering almost the entire site. [Ash. Ex. 229 at 29-32; PCS Ex. 4, Fig. 3-62 – 3-67; Trial Tr. 1192:13-1197:7, 2026:19-2030:9]. ROC can become contaminated in three ways: 1) wicking from the soil below, [Trial Tr. 1442:6-12]; 2) overland water flow or runoff, [Trial Tr. 1442:6-12]; and 3) truck traffic carrying contaminated soil onto the rock or pushing the rock into the soil [Trial Tr. 765:17-19, 1373:3-8, 1488:15-24]. The ROC on the Site may be contaminated above remediation levels.
132. At the direction of Zeller, EPA officials inspected the property in 1999 to evaluate the work conducted by the Holcombe and Fair Parties. [Ash. Ex. 80; PCS Ex. 144]. The findings of this inspection were documented in a letter dated March 23, 1999 from Zeller to an official at OCRM. [Ash. Ex. 80; PCS Ex. 144]. While this letter expressed concern that the Holcombe and Fair Parties had not submitted a work plan to EPA for approval prior to performing work at the Site, the letter concluded that the work performed was beneficial to the property because it mitigated the risks posed by contamination. [Trial Tr. 2609:22-2610]. Zeller acknowledged the benefits of the work as follows:

On January 12, 1999, Mr. Don Rigger, EPA-OSC, visited the subject property to inspect the progress of work and to conduct a Removal Assessment. Based on the data available at that time, it was concluded that the Columbia Nitrogen site did not meet the

established criteria in the National Contingency Plan (NCP) to initiate an EPA Removal Action. In other words, capping of the site with approximately 6 inches of crushed/compacted limestone has mitigated potential short-term risks posed to on-site workers/trespassers by exposure to site soils. Moreover, the construction of a surface water detention basin, regrading activities and silt-fence installation is an improvement from pre-existing conditions.

[Ash. Ex. 80].

133. In early to mid-1999, DHEC inspected the Site to examine the storm water management features in place. [PCS Ex. 145]. DHEC concluded that Seabrook's original storm-water management plan was never implemented. [PCS Ex. 145]. DHEC fined Holcombe and Fair \$1,000 for "non-compliance with the original approvals from OCRM." [PCS Ex. 146].
134. From 1999 to 2001, Black and Veatch conducted Phase I and Phase II Remedial Investigations to characterize the contamination associated with the Site for EPA. [Ash. Exs. 87, 91].
135. The Phase I Remedial Investigation Report concluded that "potentially unacceptable levels of risk are posed to ecological receptors exposed to inorganics, [semi-volatile organic compounds ("SVOCs")], and pesticides" in soils, surface water and sediments at the Site. [Ash. Ex. 87 at 224]. The report also noted low pH levels in the groundwater and sediments. [Ash. Ex. 87 at 224]. The report indicated that further testing on soils, surface water and sediments should be performed. [Ash. Ex. 87 at 225].
136. The Phase II Remedial Investigation Report concluded that the surface soils, subsurface soils, sediments, groundwater, and surface water on the Site are contaminated with lead and arsenic. [Ash. Ex. 91 at 7-4 – 7-8]. There is no evidence that the Holcombe and Fair Parties introduced any hazardous substances to the Site.

137. Black and Veatch prepared a Final Feasibility Study Report for EPA dated October 31, 2002 that analyzed alternative approaches for remediating the Site as well as the costs of these approaches. [Ash. Ex. 93].
138. On December 31, 2002, Holcombe Enterprises and Fair contracted with Ashley to sell the remaining property at the Site. [PCS Ex. 31; Ash. Ex. 94; Trial Tr. 75:25-76:9]. The Contract of Sale contemplated that the parties would enter into an environmental indemnity agreement that would be made part of the Contract of Sale. [Ash. Ex. 94 at A00435-6]. The Contract of Sale was amended four times. [PCS Exs. 32-35].
139. On November 24, 2003, Holcombe Enterprises, Fair, and Ashley entered into the Fourth Amendment to the Contract of Sale. [Ash. Ex. 94; Trial Tr. 80:8-16]. This amendment added section 5.10, titled Environmental Indemnity, to the Contract of Sale. [Ash. Ex. 94 at A00456-62]. In significant part, the indemnity clause provided as follows:

5.b. Release of Claims by Purchaser. Purchaser has accepted the Property and for itself and its members and managers and their respective successors, assigns, officers, directors, employees and agents (collectively the "Releasing Parties") waives, releases and discharges the Seller from any and all liabilities, actions, causes of actions, claims and demands whatsoever, whether or not well founded in fact or in law, including without limit response costs incurred under the Environmental Laws, and from any suit or controversy arising from or in any way related to the existence of Hazardous Materials in or with respect to the Property and from any Hazardous Material Claims arising from or related in any way to the Property, except for matters relating to a breach of representation or warranty under the Contract.

[Ash. Ex. 94 at 00458, ¶ 5(b)(emphasis added)]. In a separate provision, Ashley indemnified Holcombe Enterprises and Fair for any claim brought by EPA up to \$2.7 million with \$200,000 of the first \$400,000 paid by the Holcombe and Fair Parties. [PCS Ex. 35 at

5(d)]. The Agreement also includes a broader indemnification against claims brought by any third parties, on the condition that Ashley acquire cost cap and legal liability insurance to protect it from cost overruns in remediating the Site. [PCS Ex. 35 at 5(e); Trial Tr. 47:3-9, 275:10-18]. The broad indemnity provision is not currently in effect because Ashley has not acquired the cost cap and legal liability insurance. [PCS Ex. 35 at 5(e); Trial Tr. 275:10-18, 47:3-9, 726:8-12]. Ashley could still acquire the insurance necessary to make the broad indemnity effective. [Trial Tr. 726:5-7].

140. Ashley manager Robert Clement testified that the intent of the indemnity was for Ashley not to sue Holcombe, Fair, or Holcombe Enterprises for any environmental contamination claims. [Trial Tr. 144:14-22]. Counsel for Ashley stipulated on the trial record that:

Ashley does not dispute that its release of Holcombe and Fair was intended to extend to all of the Holcombe and Fair Parties, that is to Mr. Holcombe individually, as well as the Holcombe Enterprises, L.P. and to Mr. Henry Fair, and to all of the sites formerly owned by Holcombe and Fair. So our release extends to all of those parties and to all of that property.

[Trial Tr. 1410:24–1411:7].

141. Ashley does not contest that the indemnity has the effect of preventing Ashley from recovering money from the Holcombe and Fair parties to clean up the Site. [Trial Tr. 276:7-17, 276:21-277:2]. Counsel for PCS stated that PCS has no objection to Ashley bearing financial responsibility for any allocation of responsibility made to the Holcombe and Fair Parties. [Trial Tr. at 3220:8-10].
142. On November 24, 2003, Holcombe Enterprises and Fair conveyed 27.62 acres of the Site to Ashley. [Entry 118 ¶ 9]. The contractual documents for the sale of this property provided that Ashley would assume existing leases with tenants. [Ash. Exs. 94, 113].

143. The Holcombe and Fair Parties' cost basis in the portion of the Site sold to Ashley was \$491,000. [Trial Tr. 2644:23-2645:1]. The Holcombe and Fair Parties sold their remaining property on the Site to Ashley for \$2,700,000 [PCS Exs. 35, 31], resulting in a profit of approximately \$2,200,000. In addition, the Holcombe and Fair Parties received income from leasing the property. [Trial Tr. 2645:4-10].

H. Allwaste Ownership Period (1989-2008)

144. Allwaste was incorporated in Georgia in 1985 as Allwaste Tank Cleaning, Inc. [Allwaste Ex. 1; Ash. Ex. 200]. On January 25, 2008, Allwaste became PSC Container Services, LLC, a Delaware limited liability company. [Allwaste Ex. 1; Ash. Ex. 200].
145. Allwaste purchased three acres of the Site from the Masts by deed dated August 16, 1988, and recorded on January 11, 1989. [Allwaste Exs. 1, 4; Ash. Ex. 200]. At the time of Allwaste's acquisition from the Masts, the parcel had already been covered with a layer of ROC and some buildings constructed. [Trial Tr. 2593; 3046:5-8]. Allwaste leased an additional two acres of the Site from the Holcombe and Fair Parties beginning in December of 1991 for the storage of trucks and containers. [PCS Ex. 28 at A04_01807; Trial Tr. 3043:11-14].
146. For twenty years, Allwaste operated a container cleaning and storage facility on its three-acre parcel. [PCS Ex. 9 at A03_03149; Trial Tr. 3036-3043]. Allwaste parked trucks on the leased parcel before and after they were cleaned. [Trial Tr. 3060:9-15]. Allwaste cleaned both over-the-road tanker trucks and isocontainers. [Trial Tr. 3036:3-4]. Isocontainers hold a wide variety of hazardous and non-hazardous materials and can be shipped overseas. [PCS Ex. 9 at A03_03112; Trial Tr. 3036:3-10].

147. When the containers were cleaned, residual material was first drained from the containers into a five gallon pail. [PCS Ex. 9 at A03_03149; Trial Tr. 3036:23-3037:2]. Materials cleared from tanks were classified as either hazardous or non-hazardous. [Trial Tr. 3037:4-6]. Hazardous materials were placed in drums and shipped to a hazardous waste site. [Trial Tr. 3037:6-8]. Non-hazardous materials were sent to a non-hazardous landfill. [Trial Tr. 3038:1-4]. Rinse water was directed into the Charleston sewer system. [Trial Tr. 3037:9-12, 3045:11-19, 3049:22-3051:1]. The containers were then cleaned in either one of three wash bays in the main building on the parcel, or in the exterior wash bay. [PCS Ex. 9 at A03_03149]. Cleaning solvents, including diesel fuel, caustic sodas, and sulfuric acid were stored in containers on the pads where they were used. [PCS Ex. 9 at A03_03118, A03_03147-9, A03_03358, Photograph 7; PCS Ex. 10 at A04_04642, Photograph 3]. Allwaste used up to 300 gallons of diesel fuel each day and cleaned twenty-five to thirty containers a day on average. [PCS Ex. 9 at A03_03149; PCS Ex. 10 at A03_03347]. Wastewater generated by the cleaning process was collected in a trench and sumps located in the main wash building, and a sump in the exterior wash bay. [PCS Ex. 9 at A03_03145, 49]. The sumps were intended to capture spills of any hazardous materials until that material was pumped out and placed in a drum. [Trial Tr. 386:5-22, 3067:4-12]. From the sumps, the wastewater was pumped into a wastewater treatment system. [PCS Ex. 9 at A03_03145; *see also* Trial Tr. 3045:11-19, 3062:6-10]. The pumps did not remove all of the solid material that collected in the sumps. [PCS Ex. 9 at A03_03358, Photograph 9; *see also* Trial Tr. 3063:1-3064:3].
148. During its ownership period, Allwaste constructed a new building on its property, expanded

existing structures, and modified the underground components of its wastewater collection system. [PCS Ex. 12 at Allwaste 0950, Allwaste 0952, Allwaste 0955, Allwaste 0960]. Allwaste's facility manager, Mr. Warren ("Warren"), testified that he did not know how much excavation this construction required. [Trial Tr. 3058:6-11].

149. On or about February 19, 2007, Ashley executed a Purchase and Sale Agreement with Allwaste. [Allwaste Exs. 1, 2; Trial Tr. 293-94]. The agreement between Ashley and Allwaste included the following language:

(i) Release. [Ashley] hereby fully and finally releases and discharges [Allwaste] from any and all Claims[] and Liabilities, whether for contribution or otherwise. [Ashley] intends for this release to be effective notwithstanding the negligence of [Allwaste] and regardless of whether the Claims and/or Liabilities arise in law, equity or under strict liability.

(ii) Indemnity. Subject only to the exclusions specifically set forth in Section 23(c)(vi) below, to the fullest extent permitted by applicable law, [Ashley] will indemnify, defend and hold harmless [Allwaste] from and against any and all Claims, and Liabilities related to or arising in connection with Claims, and all costs and expenses incurred in connection therewith (including, without limitation, attorneys' fees and expenses, including those incurred by [Allwaste] in enforcing the terms of this Agreement), even if such Claims or Liabilities arise from or are attributed to the sole or concurrent negligence of [Allwaste]. It is the intent of [Ashley], in entering into this Agreement, to indemnify and defend [Allwaste] against (1) all Claims, and Liabilities arising in connection to the Claims, that are or may be based, in whole or in part, on the sole or concurrent negligence or strict liability of [Allwaste], and (2) Indefinite Claims, and Liabilities arising in connection with Indefinite Claims. This Indemnity is intended, among other things, to cover Claims and Liabilities between [Ashley] and [Allwaste] as contemplated by CERCLA, any successor federal statute, rule or regulation, and/or comparable state statute, rule or regulation. However, this indemnity is not intended, and shall not be construed, to abrogate or diminish [Ashley's] status as a bona fide prospective purchaser in accordance with section 107(r)(1) of CERCLA and any successor federal statute, rule or regulation, and/or comparable state statute, rule or regulation.

[Allwaste Ex. 2 at 22].

150. In 2007, Ashley hired GEL to perform a pre-purchase environmental assessment of the Allwaste parcel. [PCS Ex. 9]. GEL produced three reports in connection with its investigation. [PCS Exs. 9-11]. GEL summarized the results of its initial investigation in an April, 13, 2007 environmental assessment. [PCS Ex. 9 at A03_03116]. GEL summarized the results of the testing of the soil and groundwater in an April 16, 2007 report. [PCS Ex. 11]. GEL's environmental assessment was updated on February 29, 2008. [PCS Ex. 10]. In its environmental assessments, GEL identified the cement pads and sumps on the Allwaste parcel as recognized environmental conditions ("RECs"). [PCS Ex. 9 at A03_03115]. An REC denotes "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property." [PCS Ex. 9 at A03_03115]. At Allwaste's hazardous materials storage shed, GEL observed "significant staining and cracks . . . on the floor" [PCS Ex. 9 at A03_03112, A03_03359, Photograph 16], noting that the staining "indicat[ed] spills have occurred in the past." [PCS Ex. 9 at A03_03147]. GEL concluded that "[t]he presence of spills and cracks in the concrete slab increase the potential for a release to migrate to the subsurface and is therefore considered an REC." [PCS Ex. 9 at A03_03147, A03_03119]. GEL also found RECs in the exterior wash bay. [PCS Ex. 9 at A03_03119]. GEL observed "[c]racks and significant staining by diesel fuel, detergents and container residues . . . on the concrete pad." [PCS Ex. 9 at A03_03113, A03_03136, A03_03358, Photograph 11]. GEL noted that the berm around

the pad did not prevent wash water from flowing off of the pad and into the soil. [PCS Ex. 9 at A03_03113, A03_03147]. The sump in the exterior wash bay was “clogged with silt and container residue.” [PCS Ex. 9 at A03_03147, A03_03358, Photograph 9]. In addition, “[t]ire tracks from trucks and/or trailers that had been cleaned were observed to pass through the sediment piles and stained areas suggesting residues and cleaning agents may potentially be tracked . . . onto the surrounding ROC surfaced parking areas.” [PCS Ex. 9 at A03_03358, Photograph 10]. GEL also noted that in the main wash bay “[t]he concrete floor [was] etched by either the container contents and/or treatment chemicals used to clean the container interiors.” [PCS Ex. 9 at A03_03145]. When GEL updated its report in 2008, conditions were the same. [PCS Ex. 10 at A04_04626, A04_04642, Photograph 3]. GEL’s soil and groundwater sampling, summarized in the April 16, 2007 report, indicated that there were elevated levels of iron and cadmium in the groundwater. [PCS Ex. 11 at A03_03367; Trial Tr. 380:25-381:8]. GEL also concluded that there were elevated levels of SVOCs and metals in the soil at the Allwaste parcel. [PCS Ex. 11 at A03_03366-67, A03_03373-5; Trial Tr. 380:17-24].

151. Allwaste’s operations on the Site ceased on March 19, 2008. [Trial Tr. 3051:11-13]. On March 20, 2008, Allwaste moved to a new facility in North Charleston. [Trial Tr. 3051:11-13; Allwaste Ex. 3]. Before leaving the Site, Allwaste pumped water out of the trenches and sumps. [Trial Tr. 1326:14-16]. According to Warren, the facility manager, Allwaste did not attempt to dig out the solid material that had accumulated in the sumps and trenches. [Trial Tr. 3064:4-13]. Allwaste removed its equipment from the Site between April and September 2008. [Trial Tr. 1326:8-16].

152. By deed recorded May 28, 2008, Allwaste conveyed its property at the Site to Ashley. [Allwaste Ex. 1].
153. Ashley's insurance policy covers both Allwaste and Allwaste's parent corporation as additional named insureds. [PCS Ex. 48 at A10_01242; PCS Ex. 49 at A10_01240; Trial Tr. 722:10-723:1]. Coverage under Ashley's policy is, however, excluded for certain contaminants identified in the policy including arsenic, iron, dieldrin, PAHs, cadmium and lead. [PCS Ex. 48 at A10_01243; Trial Tr. 729:2-11].
154. The Allwaste parcel and the two acres formerly leased by Allwaste are contaminated with lead and arsenic above the proposed remediation levels. [PCS Exs. 226 at PCS002_002580-81; PCS Ex. 227 at A 00287, A 00292, Figs. 3-3a, 3-4a; 120 at 1; Ash. Ex. 194, Drawing 2, A04_04879; Trial Tr. 672:17-673:6].
155. If any leaks occurred from Allwaste's business activities, those releases contributed little to the need for remediation. [Ash Ex. 274 at 11-13; PCS Ex. 194, Drawings 8-11]. Allwaste did not introduce any lead, arsenic, or cPAHs to the Site.

I. RHCE Tenancy

156. On December 29, 1990, the Holcombe and Fair Parties entered into a Contract of Sale with RHCE for two acres of land at the Site. [Holcombe and Fair Parties Ex. 3 at 3; Trial Tr. 2594:4-2597:8]. This contract was executed by Hood, who is the President of RHCE. [PCS Ex. 71 at RCHE000071].
157. In July of 1991, Hood and RHCE were informed by way of a letter authored by GEL that the groundwater on the Site contained elevated levels of nitrates and sulfates "indicative of impact." [PCS Ex. 134 at HF000543]. The letter noted that agencies "could require further

- assessment,” but indicated that this would not affect using the property for the parking of commercial vehicles and containers on a layer of ROC. [PCS Ex. 134].
158. In December 1991, Landmark Construction excavated a 1380 cubic foot pond, installed two fifty-foot asphalt driveways, stripped six inches of topsoil, graded and proof rolled, and extended sewer and water lines at the parcel RHCE contracted to purchase. [City Ex. 17 at 16; PCS Ex. 91 at 000030; PCS Ex. 93 at 000722]. This work was directed and paid for by RHCE. [PCS Ex. 90 at 000028; PCS Ex. 91 at 000030; PCS Ex. 93 at 000028]. The construction of a detention pond on the Site improved surface runoff. [Trial Tr. 479:7-14].
159. On January 15, 1992, the Holcombe and Fair Parties conveyed the two acres of the Site to Hood rather than RHCE. [RHCE Ex. 2; PCS Ex. 71 at RCHE000071-73].
160. Since 1992, RHCE has leased the parcel from Hood and operated a dropyard on the Site. [RHCE Exs. 5-7; Trial Tr. 1869:13-23; PCS Ex. 1 at 4]. EPA and DHEC are aware of this use and have not asked RHCE to cease operations. [Trial Tr. 505:5-12].
161. Sometime between 1994 and 1997, RCHE filled in the detention pond on the Hood parcel and covered it with ROC. [Trial Tr. 2358:22-2359:23].
162. No evidence exists that a release of motor oil or gear oil occurred on the Hood parcel. [Trial Tr. 1877:15-22]. There is also no evidence that hazardous materials or containers were ever present on the Hood parcel. [Trial Tr. 506:12-14]. RHCE did not introduce any lead, arsenic, or cPAHs to the Site.
163. The Hood parcel is currently covered with a layer of ROC. [PCS Ex. 4, Fig. 9-9].
164. The Hood parcel is currently zoned heavy industrial by the City. [Trial Tr. 501:5-9, 773:5-7]. However, the Hood parcel is contaminated with lead and arsenic above the proposed

residential remediation levels [PCS Ex. 120 at 3; PCS Ex. 226 at PCS002_002580-81; PCS Ex. 227 at A 00287, A 00292, Fig 3-3a & 3-4a; Trial Tr. 672:17-673:2, 1875], and the proposed remediation plan includes remediation of the Hood parcel to residential standards. [PCS Ex. 200 at 3; PCS Ex. 213, Drawing 8]. The residential standards are 22.5 parts per million for arsenic and 400 parts per million for lead. [Trial Tr. 771:21-25].

J. City of Charleston Ownership Period (1991-present)

165. On October 22, 1991, the Charleston City Council approved a bill authorizing the Mayor to accept a quitclaim deed on behalf of the City for the Milford Street extension. [PCS Ex. 70 at C000024]. The bill stated that the City would own “all of Milford Street.” [PCS Ex. 70 at C000024].
166. The Holcombe and Fair Parties, as grantors, transferred the Milford Street extension to the City by quitclaim deed dated September 30, 1991. [PCS Ex. 69]. Through the deed, the Holcombe and Fair Parties “remised, released, and forever quit-claimed” the property to the City. [PCS Ex. 69 at 1]. The Grantors retained no interest in the premises, as the deed provided that the Grantors shall not “at any time hereafter, by any way or means, have, claim, or demand any right or title to the aforesaid premises or appurtenances, or any part or parcel thereof, forever.” [PCS Ex. 69 at 2]. The deed makes no provision for the property to revert back to the Holcombe and Fair Parties. Fair testified that the 1991 deed resulted in the City owning the “road and the land under it.” [Trial Tr. 2658:23-2659:3].
167. The City’s interest does not include the turnaround at the end of the Milford Street extension. [Trial Tr. 2779:17-2780:8]. In the 1991 deed, the City agreed to abandon the turnaround in exchange for “owning all of Milford Street as shown on the plat” attached to the deed. [PCS

Ex. 69 at 1].

168. The Milford Street extension is fifty feet wide and consists of 1.28 acres. [PCS Ex. 1 at 4; PCS Ex. 69; PCS Ex. 188; Ash. Ex. 194 at 2]. The Milford Street extension includes a twenty-five foot wide, paved roadway and drainage swales on either side of the road. [PCS Exs. 69, 188]. The Milford Street extension runs through the Site and allows access to the leased and sold tracts. [PCS Ex. 4, Fig. 9-9]. A portion of Milford Street runs through soil contaminated with lead and arsenic above the proposed remediation levels because of the historic fertilizer manufacturing operations at the site. [PCS Ex. 226 at PCS002_002580-81; PCS Ex. 120 at 2; PCS Ex. 227 at A 00287, A 00290, A 00292-6, Figs. 3-3a, 3-3d, 3-4a, 3-4b, 3-4c, 3-4d, 3-4e; PCS Ex. 4, Fig. 6-1; Ash. Ex. 194 at A04_04879]. No part of the construction of the road was paid for or directed by the City. [Trial Tr. 2656:2-2657:9].
169. The City continues to have an interest in the Milford Street extension. [Trial Tr. 129:17-22].
170. There is no evidence that anyone notified the City of the contamination on the Site prior to the City's acquisition of the road. [*See* Trial Tr. 129:2-5]. In addition, the City did not investigate the environmental condition of the property before taking its interest in the Milford Street extension because it was not customary for a municipality to conduct an environmental investigation prior to accepting a dedication of a right-of-way or deed of a road at the time. [Trial Tr. 127:22-128:21].
171. No regulatory agency has called on the City to take any action with regard to the contamination under the Milford Street extension. [Trial Tr. 129:6-9].
172. The pavement on the Milford Street extension acts as a cap over that portion of the Site, precluding erosion of the contaminated soil, preventing human contact with the soil under

- the road, and preventing storm water from reaching the soils under the road, which would cause contaminants to leach into the groundwater. [Trial Tr. 479:15-22].
173. Although the pavement on the Milford Street extension will be removed as part of the remediation of the Site, the expected future use of the Site requires the removal of the Milford Street extension for the construction of new roads. [Trial Tr. 296:3-297:5].
174. There was no evidence presented at trial that the City has contributed any arsenic, lead, or other contaminant of concern to the Site, or has engaged in earthmoving activities on the Site.
175. The City did not acquire the Milford Street extension to make a profit. [Trial Tr. 129:17-22].
176. The City has taken substantial steps to enable the Magnolia Development project to put the Site back to productive use. [Trial Tr. 101:10 - 102:13]. This includes the passing of a Tax Increment Financing (“TIF”) ordinance to provide funds for the redevelopment, to be repaid with the incremental increase in taxes from the improved property. [Trial Tr. 65:12-24, 68:23, 69:16, 103:21-105:2, 108:21-109:7]. As of the date of trial, the City had issued \$15,600,000 worth of TIF bonds for the project, out of an available \$140,000,000 in TIF bonds, and \$30,000,000 in municipal improvement bonds. [Trial Tr. 65:12-24, 68:23, 69:16, 103:21-105:2, 108:21-109:7].
177. At the time of trial, the City’s budget was experiencing a significant deficit due to decreased revenues. [Trial Tr. 3087:15-3088:12]. The City’s deficit for fiscal year 2009 was \$2,200,000, which required the City to expend reserves in that amount. [Trial Tr. 3087:15-3088:12]. To avoid further invading its reserves in 2010, the City cut services in several areas and has imposed minimum five-day furloughs on all City employees. [Trial Tr.

3089:4-13, 3090:8-3092: 9].

K. Ashley's Ownership (2002- present)

178. Ashley is a South Carolina limited liability company. The principals of Ashley are Cherokee Investment Partners (“Cherokee”), Craig Briner, Jim Lumsden, and Robert Clement. [Trial Tr. 63:14-20; Ash. Ex.116 at A01_00281, A01_00282]. Cherokee is a large investment fund [Trial Tr. 149:19-23, 183:21-23] that has dedicated a billion dollar fund to the acquisition of Brownfields³ properties. [Trial Tr. 520:9-20].
179. In 2002, after the passage of the Brownfields Amendments, Ashley initiated its participation in the Magnolia Development project. [Ash. Ex. 224 at 1]. Magnolia is planned as a sustainable, mixed-use development. [Ash. Ex. 224 at 1]. To date, Cherokee has invested more than \$50,000,000 in acquiring properties for the Magnolia Development project. [Trial Tr. 184:11-16].
180. To oversee the environmental aspects of all of the parcels of land comprising the Magnolia Development project, including the Site, Ashley retained the services of Scott Freeman (“Freeman”), an environmental engineer with experience on over thirty Superfund sites and familiarity with the Brownfields Amendments relating to the Bonafide Prospective Purchaser (“BFPP”) defense. [Trial Tr. 139:10-13, 538:8-25, 582:18-583:10, 583:21-584:17]. Ashley assigned Freeman the responsibility of ensuring that Ashley complied with all BFPP requirements. [Trial Tr. 534:24-535:5].
181. Since purchasing the Site, Ashley has provided security and conducted periodic inspections

³ CERCLA defines a brownfields property as “real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.” 42 U.S.C. § 9601(39)(A).

- of the Site. [Trial Tr. 595:10-22; Ash. Ex. 227]. The Site has been fenced, gated, and placarded with no-trespassing signs to prevent unauthorized entry and potential exposure to contaminants. [Trial Tr. 140:3-8].
182. GEL prepared a September 25, 2003 Phase I Environmental Site Assessment for Ashley prior to Ashley's purchase of the Site. [Ash. Ex. 110]. This Environmental Site Assessment incorporated EPA's October 31, 2002 Final Feasibility Study Report. [Ash. Ex. 110].
183. On November 23, 2003 Ashley notified EPA that it had acquired a portion of the Site and explicitly requested that EPA inform Ashley if EPA desired "specific cooperation, assistance, access or the undertaking of any reasonable steps with respect to the Site." [Ash. Ex. 114].
184. On November 24, 2003, Holcombe Enterprises and Fair conveyed 27.62 acres of the Site to Ashley. [Entry 118 ¶ 9]. The contractual documents for this sale provided that Ashley would assume existing leases with tenants. [Ash. Exs. 94, 113].
185. On February 26, 2004, Ashley responded to a request for information from EPA. [Ash. Ex. 116].
186. In 2004, GEL conducted a pre-design site characterization study for Ashley, collecting 452 soil samples from 159 soil boring locations on the Site at depths of one to five feet for the purpose of more fully characterizing and delineating the areas of elevated arsenic and lead at the Site. [Ash. Ex. 140 at A00271-A00273]. The GEL report does not mention the various construction activities undertaken by the Holcombe and Fair Parties on the property, such as the construction of the road and the capping of the Site with ROC. [Trial Tr. 465:9-15; PCS Ex. 259]. The GEL report also does not address the Holcombe and Fair Parties' construction of three detention ponds on the Site between 1992 and 1999. [PCS Ex.

- 4 at Fig. 4-1].
187. A triangular lot to the west of the Allwaste parcel, leased by Ashley to Allwaste from 2003 to 2008, was not completely covered in crushed rock in 2004. [PCS Ex. 22 at A 00283, Fig. 1-2]. On other portions of the Site, the crushed rock cover was degraded. [Trial Tr. 2031:14-2032:10].
188. Ashley knew “there were occasions of midnight dumping” on the Site. [Trial Tr. 265:1-2]. Although the leased parcels were fenced, the gates were not locked until after the tenants vacated. [Trial Tr. 263:8-23; Ash. Ex. 169 at A01_07422].
189. In June 2006, Freeman walked the Site with Ashley Expert Jack Rigenbach (“Rigenbach”) and noticed a thirty foot by five foot area of stained soil. [Trial Tr. 554:10-555:3, 1291:10-1292:5; Ash. Ex. 169; Ash. Ex. 172 at A01_05742, A01_05748]. Freeman thought that it “looked like . . . a surface spill . . . or was related to the Site.” [Trial Tr. 554:22-25; Ash. Ex. 169 at A01_07422]. Freeman acknowledged that “[he] wasn’t sure at the time whether that was a stain or a spill” and that he asked GEL to assess the problem. [Trial Tr. 610:8-14; 806:19-807:6]. GEL took a sample of the soil and tested it for lead and arsenic, but no other contaminants. [Ash. Ex. 172 at A01_05742; Trial Tr. 1359:14-1360:10]. Because the sample was found to contain lead and arsenic, Freeman concluded that the stain was not a spill, but instead was related to the past contamination of the Site and covered it with ROC. [Trial Tr. 610:8-21].
190. Freeman, testified that he began “paying attention” to a pile of debris onsite in 2006. [Trial Tr. 552:8-14, 552:24-553:15]. However, “there was no effort . . . made to identify what was in the trash pile, what were the characteristics of that trash pile, or to remove the trash pile.”

- [Trial Tr. 2439:3-6]. The trash pile contained a barrel, tires, and discarded vehicles. [PCS Ex. 18 at A01_05783, A01_05787, A01_05790, A01_05794; Trial Tr. 733:3-23].
191. Ashley granted Site access to EPA in 2007. [Ash. Ex. 188 at 2].
192. On April 13, 2007, a Phase I Environmental Site Assessment was conducted on the Allwaste Parcel. [Ash. Ex. 179]. On April 16, 2007, a Soil and Groundwater Investigation was conducted on the Allwaste Parcel. [Ash. Ex. 180]. On February 29, 2008 the Phase I Environmental Site Assessment on the Allwaste Parcel was updated. [Ash. Ex. 193].
193. In March 2008, PCS Experts Wayne Grip (“Grip”) and Dr. Brian Murphy (“Murphy”) conducted an investigation of the Site, excluding the Allwaste parcel, on behalf of PCS. [Trial Tr. 1488:25-1489:1]. The investigation included taking soil and sediment samples from the surface and subsurface. [Trial Tr. 1488:25-1489:1]. During this investigation, Murphy observed areas where the ROC had eroded away, exposing contaminated soil. [Trial Tr. 1488:25-1489:1].
194. On March 27, 2008, Ashley submitted a Removal Action Work Plan for the soil and sediment at the Site to EPA and DHEC. [Ash Ex. 195].
195. In June 2008, Ashley retained an environmental consulting firm to demolish all remaining structures on the Allwaste parcel. [Trial Tr. 561:14-565:1]. No underground demolition activities were conducted. [Trial Tr. 561:14-565:1]. When the buildings were demolished, Ashley left in place the cement pads, sumps, trench, and underground pipes. [Trial Tr. 564:5-565:1]. The demolition of the buildings permitted runoff to collect in the pads, the sumps, and the trench. [Trial Tr. 400:20-23; 3054:11-17]. This is because there was no longer any pumping equipment in place to remove the water. [Trial Tr. 400:20-23; 3054:11-17].

17].

196. Hutto testified that releases could occur from the sumps. [Trial Tr. 400:20-401:13]. Freeman knew that the sumps and pads posed a threat to the environment in the summer of 2008. [Trial Tr. 766:13-16]. According to Freeman, Ashley had a protocol in place that required it to demolish concrete slabs and to look under the slabs “to make sure that there weren’t any more environmental conditions that we need to be concerned about.” [Trial Tr. 565:17-21, 761:2-5; Ash. Ex. 170]. This protocol was not followed on the Allwaste parcel. [Trial Tr. 565:2-566:16]. After the buildings were torn down, Freeman walked the Allwaste parcel [Trial Tr. 756:7-15], but he did not stop to take a “detailed look” at the pads, sumps, or trenches. [Trial Tr. 758:18]. In passing, he saw what “appeared to be some dirt around or in those trenches” [Trial Tr. 567:3-23, 757:11-20] and cracks in the cement pads. [Trial Tr. 757:21-22]. Freeman left the property without taking additional action to protect against potential releases of hazardous substances. [Trial Tr. 757:23-758:17]. PCS expert Marie BenKinney (“BenKinney”) testified that there was a threat of release of hazardous substances from the sumps at the Allwaste parcel. [Trial Tr. 2419:20-2421:19].
197. In 2008, Ashley removed the debris pile from the main portion of the Site and completed hazardous waste manifests. [PCS Ex. 19]. The hazardous waste manifests show that Ashley removed hazardous substances from the Site, including a cleaning liquid containing hydrochloric acid and waste paint. [PCS Ex. 19 at A05_01238, A04_05365, A04_05368, A04_05370, A04_05376, A04_05380].
198. On September 3, 2008, Ashley wrote a letter to EPA acknowledging that the Holcombe and Fair Parties could be liable for response costs, and that EPA has “insiste[d] on asserting a

claim for cost reimbursement against Holcombe and Fair.” [PCS Ex. 256 at 2]. The basis of that claim is their “installation of a roadway and storm water detention ponds, and covering the Site with crushed limestone rock.” [PCS Ex. 256 at 6]. In this letter, Ashley stated that because of the indemnity between Ashley and the Holcombe and Fair Parties, Ashley would ultimately be responsible for “substantially all expenditures for EPA’s past costs that EPA would recover from Holcombe and Fair.” [PCS Ex. 256 at 2]. Ashley stated that if EPA insisted on pursuing a claim against the Holcombe and Fair Parties it would discourage Ashley’s future development efforts. [PCS Ex. 256 at 6]. Ashley stated that its “actions to secure an alternative source of repayment of past costs [through the within lawsuit] should provide adequate consideration to secure a release of Ashley’s indemnitees.” [PCS Ex. 256 at 5].

199. In July 2009, PCS’s consultant, Exponent, conducted a second round of sampling focusing on the land where the debris pile was located, and the Allwaste parcel. [PCS Ex. 1 at 13; PCS Ex. 3 at 1; PCS Ex. 4 at 8]. Exponent took three samples of soil that had been under the debris pile. [PCS Ex. 3 at 6; Trial Tr. 858:12-14, 859:15-20, 1490:17-1491:16]. The sampling results indicated the presence of hydrocarbons, and elevated levels of benzo(a)pyrene and other contaminants. [PCS Ex. 3 at 6; Trial Tr. 858:12-14, 859:15-20, 1490:17-1491:16]. When these samples were taken, debris including buckets, tires, and a bottle of engine oil that contained fluid remained on the Site. [PCS Ex. 3 at 2; PCS Ex. 7 at 5].
200. Exponent also conducted surface and subsurface soil sampling, and investigated the condition of the cement pads, sumps, and trench on the Allwaste parcel. [PCS Ex. 3 at 1].

Hazardous substances were found in the soil, sediment, and water on the Allwaste parcel. [PCS Ex. 7, Table 2; PCS Ex. 3, Table 4]. The sump contamination was not limited to petroleum products. [Trial Tr. 2433:25-2434:1; PCS Exs. 7, Table 2; PCS Ex. 3, Table 4]. The sediments in the main building sump were contaminated with metals, volatile organic compounds (“VOCs”), and semi-volatile organic compounds (“SVOCs”). [Trial Tr. 2418:14-25]. The water was contaminated with metals and VOCs. [Trial Tr. 2419:1-3]. Sediment and water from the sump in the hazardous materials storage shed were contaminated with VOCs, solvents, chlorinated solvents, and phthalates. [Trial Tr. 2419:10-15]. “[I]n the sums there are other chemicals that are also considered hazardous substances under the regulations. . . . That would mean that the material [i]n that sump is co-mingled and would not be subject to the petroleum exclusion.” [Trial Tr. 862:6-9, 2465:18-2466:2]. The exterior wash bay sump contained similar constituents. [Trial Tr. 2419:4-9].

201. It is likely that there were releases from the sums and the pads on the Allwaste property after Ashley tore down the protective structures in 2008. [Ash. Ex. 271 at A01_07865, A01_07867; Trial Tr. 761:2-5]. This is because there was standing water on the pads and in the sums, which overflowed with some regularity. [Trial Tr. 2422:13-22; 2436:20-2437:8; Ash. Ex. 271 at A01_07866; PCS Ex. 3 at 2-3; PCS Ex. 7 at 5]. When the sums overflowed, the water reached cracks in the pads and even the edge of the pads. [PCS Exs. 3 at 2-3; 7 at 5].
202. In September 2009, Ashley retained GEL to perform an evaluation of the sums on the Allwaste parcel. [Ash. Ex. 271]. GEL’s investigation entailed the following: (1) observing

- the sumps for eight hours to see if the water levels remained constant; and (2) analyzing the depth of cracks in sumps. [Ash. Ex. 271 at A01_07866, A01_07867]. After completing these tasks, GEL washed the sumps and filled them with concrete. [Ash. Ex. 271 at A01_07865, A01_07867].
203. GEL concluded that the only water loss was due to evaporation and that the sumps were not leaking into the subsurface. [Ash. Ex. 271 at A01_07866]. GEL's report indicated a "potential for leakage" in three sumps and the trench. [Ash. Ex. 271 at A01_07867-8; Trial Tr. 398:6-18, 405:23-25]. Hutto acknowledged at trial that there is a crack at least twelve inches deep in one sump. [Trial Tr. 406:5-20].
204. GEL's investigation was insufficient to establish that the structures did not leak. GEL measured the water levels in only some of the sumps and did not analyze the trench in the main wash bay or the sump in the eastern portion of that building. [Trial Tr. 402:9-24, 403:9-19]. GEL also disregarded its measurements for the sump in the hazardous materials storage shed because the water level rose in that sump during the course of the test. [Trial Tr. 404:3-405:7]. Despite acknowledging that there were cracks in the cement pads, and evidence of water on the pads, GEL did not evaluate the cracks or the possibility that hazardous substances had penetrated those cracks. [Trial Tr. 405:13-18]. Because GEL did not evaluate the sumps over a more extended period of time, it could not measure "any kind of loss that might be occurring through leaching or leaking through the sumps." [Trial Tr. 2437:15-20].
205. On October 8, 2009, Ashley submitted to EPA and DHEC a revised cost estimate for the removal action at the Site. [Ash. Ex. 214]. This revised cost estimate proposed to dispose

of all soils and sediments contaminated above remediation levels off-site as opposed to consolidating some contaminated soils and sediments on-site for treatment. [Ash. Ex. 214].

The cost estimate for the new approach was \$8,021,240. [Ash. Ex. 214]. The estimated cost of the old approach involving the on-site consolidation of some contaminated soils and sediments was \$8,778,221.

- 206. No manufacturing operations have been conducted on the Site during Ashley's ownership of the Site [Ash. Ex. 258 at 3; Trial Tr. 140:23-141:1].
- 207. Ashley has no direct or indirect familial relationship with other PRPs. [Trial Tr. 141:14-145:2, 181:13-182:9].

II. CONCLUSIONS OF LAW

A. Rule 52(c) Motions

1. Allwaste's Motion for Judgment on Partial Findings

At issue in Allwaste's Motion for Judgment on Partial Findings is whether the release and indemnity provisions of the February 19, 2007 Purchase and Sale Agreement between Allwaste and Ashley bar all actions against Allwaste. The parties do not dispute that Ashley has indemnified Allwaste against "any and all claims" related to the Site. [Entry 517 at 2; PCS Proposed Findings ¶ 381]. PCS contends that the effect of this indemnification is to shift the financial responsibility for any environmental contamination that Allwaste is found responsible for to Ashley. [PCS Proposed Findings ¶ 388].

CERCLA permits parties to shift the burden for paying response costs through contractual indemnification and release agreements. *See* 42 U.S.C. § 9607(e)(1) ("Nothing in [CERCLA § 107(e)(1)] shall bar any agreement to insure, hold harmless, or indemnify a party to such agreement

for any liability under [CERCLA § 107].”); *see also C.P. Chem., Inc. v. Exide Corp., Inc.*, 14 F.3d 594 (Table), No. 93-1426, at *1 (4th Cir. Dec. 28, 1993) (stating that CERCLA liability can be allocated by contract); *Dent v. Beazer*, 993 F. Supp. 923, 939 (D.S.C. 1995) (“Under CERCLA, parties are free to contractually shift the burden for liability for response costs among themselves.”). “A private party contract which apportions CERCLA liability must contain a provision which allocates risks of this nature to one of the parties.” *Dent*, 993 F. Supp. at 939 (citing *Rodenbeck v. Marathon Petroleum Co.*, 742 F. Supp. 1448, 1456 (N.D. Ind. 1990)). This is because “[s]uch agreements cannot alter or excuse the underlying liability, but can only change who ultimately pays that liability.” *Vill. of Fox River Grove v. Grayhill, Inc.*, 806 F. Supp. 785, 792 (N.D. Ill. 1992).

Federal law governs the validity of releases of federal causes of action. *Pinchback v. Armistead Homes Corp.*, 907 F.2d 1447, 1453 (4th Cir. 1990) (citing *Gamewell Mfg., Inc. v. HVAC Supply, Inc.*, 715 F.2d 112, 114 & n. 4 (4th Cir. 1983)). Federal courts are competent to formulate a federal rule of decision that incorporates state law when making determinations related to the adjudication of federal claims. *See United States v. Kimbell Foods, Inc.*, 440 U.S. 715, 726-27 (1979); *United States v. Little Lake Misere Land Co.*, 412 U.S. 580, 592-95 (1973).

A joint tortfeasor may recover from another joint tortfeasor “unless the other previously had a valid settlement and release from the plaintiff.” Restatement (Third) of Torts § 23(a). This means that an individual or entity that settles with the plaintiff before final judgment is not liable for contribution to others for the injury. Restatement (Third) of Torts § 23 cmt i. According to the Restatement, where a tortfeasor has settled with the plaintiff before the initiation or conclusion of a law suit, the settling tortfeasor should be dismissed even if contribution claims have been made against the settling tortfeasor, because these contribution claims are barred by law. Restatement

(Third) of Torts § 24 cmt. e. South Carolina law contains a similar rule: “When a release . . . is given in good faith to one of two or more persons liable in tort for the same injury . . . [the release] discharges the tortfeasor to whom it is given from all liability for contribution to any other tortfeasor.” S.C. Code Ann. § 15-38-50. Thus, if Allwaste has been released from liability by Ashley, it must be dismissed from the case as no contribution claim may be made against Allwaste.

A release is interpreted according to the general principles of contract construction. *Dent*, 993 F. Supp. at 939 (citing *Campbell v. Beacon Mfg Co.*, 438 S.E.2d 271, 272 (S.C. Ct. App. 1993)). If the language of the release is “clear and unambiguous, a court should interpret the release according to its plain meaning.” *Acstar Ins. Co. v. Harden*, 16 F. App’x 213, 216 (4th Cir. 2001); see also *Ecclesiastes v. Outparcel Assoc., LLC*, 649 S.E.2d 494, 502 (S.C. Ct. App. 2007). However, if the terms of the release are ambiguous, a court may look to extrinsic evidence to determine the meaning of a release. *Acstar*, 16 F. App’x at 216; *Ecclesiastes*, 649 S.E.2d at 502.

The release between Ashley and Allwaste “fully and finally releases and discharges [Allwaste] from any and all Claims and Liabilities, whether for contribution or otherwise.” [Ash. Ex. 177 at 22]. The word “claim” is defined in the Purchase and Sale Agreement to include: “any proceeding . . . arising out of (1) the Columbia Nitrogen CERCLA site . . . and/or (4) the pending litigation styled *Ashley II of Charleston, L.L.C. v. PCS Nitrogen, Inc.*, Civil Action No. 2:05-2782.” [Ash. Ex. 177 at 19]. The indemnity provision of the Purchase and Sale Agreement provides that Ashley shall “indemnify, defend and hold harmless” Allwaste against “any and all claims, and liabilities related to or arising in connection with claims” and specifically states that it is intended to cover CERCLA claims. [Ash. Ex. 177 at 22]. Based upon the foregoing, the court finds that the

language of the February 19, 2007 Purchase and Sale Agreement between Ashley and Allwaste unambiguously releases Allwaste from any liability associated with the Site. Allwaste's Motion for Judgment on Partial Findings [Entry 517] is **granted**. All claims for contribution against Allwaste are dismissed and Ashley must bear any allocation assessed against Allwaste.

2. The Holcombe and Fair Parties' Motion for Judgment as a Matter of Law⁴

At issue in the Holcombe and Fair Parties' Motion for Judgment as a Matter of Law is whether the release and indemnity provisions of the November 24, 2003, Fourth Amendment to the Contract of Sale among Holcombe Enterprises, Fair, and Ashley bar all contribution claims against the Holcombe and Fair Parties related to the Site.

As was previously stated, CERCLA permits parties to shift the burden for paying response costs through contractual indemnification and release agreements. *See* 42 U.S.C. § 9607(e)(1). The same legal principles that applied to the Allwaste release and indemnification agreements apply here.

The release between Ashley and the Holcombe and Fair Parties provides that:

Purchaser . . . waives, releases and discharges the Seller from *any and all liabilities, actions, causes of actions, claims and demands whatsoever*, whether or not well founded in fact or in law, *including without limit response costs incurred under the Environmental Laws*, and from any suit or controversy arising from or in any way related to the existence of Hazardous Materials in or with respect to the Property and from any Hazardous Material Claims arising from or related in any way to the Property. . . .

[Ash. Ex. 94 at 00458, ¶ 5(b)(emphasis added)].⁵

³The court recognizes that the Holcombe and Fair Parties' Motion for Judgment as a Matter of Law is actually a motion for judgment on partial findings made pursuant to Federal Rule of Civil Procedure 52(c) because a motion for judgment as a matter of law under Federal Rule of Civil Procedure 50 is not a proper motion in a non-jury case. *In re Modanio*, 413 B.R. 262, n.5 (Bankr. Md. 2009).

⁴In a separate provision, Ashley indemnified Fair and Holcombe Enterprises for any claim brought by EPA up to \$2.7 million with \$200,000 of the first \$400,000 to be paid by the Holcombe and Fair Parties. [PCS Ex. 35 at § 5(d)]. This provision is inapplicable in this case because this case was not brought by EPA.

Prior to trial, the court denied the Holcombe and Fair Parties' motion for summary judgment based upon the release from Ashley because the scope of the release was unclear. [Entry 385]. However, Ashley does not contest that the agreement has the effect of preventing Ashley from recovering money from any of the Holcombe and Fair Parties to clean up the Site. Ashley's manager, Robert Clement, testified that the intent of the indemnity was that Ashley would not be able to sue Holcombe, Fair, or Holcombe Enterprises for any environmental contamination claims. [Trial Tr. 276:7-17, 276:21-277:2]. Counsel for Ashley stipulated on the trial record that:

Ashley does not dispute that its release of Holcombe and Fair was intended to extend to all of the Holcombe and Fair Parties, that is to Mr. Holcombe individually, as well as the Holcombe Enterprises, L.P. and to Mr. Henry Fair, and to all of the sites formerly owned by Holcombe and Fair. So our release extends to all of those parties and to all of that property.

[Tr. at 1410:24–1411:7]. PCS has no objection to Ashley bearing financial responsibility for any remediation costs allocated to the Holcombe and Fair Parties. [Trial Tr. 3220:8-10].

The court notes that in many CERCLA cases, courts have found release and indemnification agreements to shield parties from financial responsibility when the release language was much less specific than in the present case. In *Dent*, this court found that under South Carolina law, a lease agreement that the lessee would save the lessor harmless from “any and all claims arising from [the lessor’s] use of the leased property” covered CERLCA claims even though the agreement was entered into prior to the enactment of CERCLA. 993 F. Supp. at 939-40. In *Rodenbeck*, the Northern District of Indiana upheld a contractual provision which provided that one of the parties would be released “from all claims and obligations of any character or nature whatsoever arising out of or in connection with said agreement” as being sufficient to indemnify against claims arising under CERCLA. 742 F. Supp. at 1448. In *Village of Fox River Grove*, the Northern District of

Illinois held that a general release between a CERCLA plaintiff and a third-party defendant, which was entered into prior to the enactment of CERCLA, barred third-party contribution claims. 806 F. Supp. at 785. In *Joslyn Mfg. Co. v. Koppers*, 40 F.3d 750 (5th Cir. 1994), the Fifth Circuit found that broad language in indemnification agreements indicated that the agreements were intended to cover all forms of liability, including liability under CERCLA, even though environmental liability under CERCLA was not contemplated at the time of contracting. *Id.* at 754. See also *Kerr-McGee Chem. Corp. v. Lefton Iron & Metal Co.*, 14 F.3d 321, 327 (7th Cir. 1994) (recognizing that a party may contract to indemnify another for environmental liability even though CERCLA was not in existence at the time of contracting); *Jones-Hamilton Co. v. Kop-Coat, Inc.*, 750 F. Supp. 1022, 1026-27 (N.D. Cal. 1990) (holding that an indemnification agreement that encompassed “all losses, damages and costs” resulting from any violation of law was sufficient to release the indemnitee from CERCLA liability even though the agreement was entered into prior to the enactment of CERCLA and did not specifically mention CERCLA).

The court finds that the language of the November 24, 2003, Fourth Amendment to the Contract of Sale among Holcombe Enterprises, Fair, and Ashley was intended to release all of the Holcombe and Fair Parties from liability to Ashley for CERCLA claims related to the Site. The indemnity at issue expressly states that the release includes response costs incurred by Ashley under the “Environmental Laws,” which term is defined in the indemnity to include CERCLA. Because the Holcombe and Fair Parties have been released from liability by Ashley, the Holcombe and Fair Parties have been discharged “from all liability for contribution to any other tortfeasor.” See S.C. Code § 15-38-50. The Holcombe and Fair Parties’ Motion for Judgment as a Matter of Law [Entry 520] is **granted**. All claims against the Holcombe and Fair Parties for contribution are dismissed.

The court finds that Ashley must bear any allocation assessed against the Holcombe and Fair Parties.

3. RHCE's Motion for Judgment on Partial Findings

At issue in RHCE's motion for judgment on partial findings is whether the RHCE parcel is contaminated and requires remediation, and whether RHCE is a PRP under CERCLA § 107.

i. Whether RHCE's Property is Contaminated and Requires Remediation

RHCE contends that because its parcel is zoned heavy industrial and is not contaminated above heavy industrial remediation levels, it need not be remediated. As a result, RHCE contends that it cannot not be held liable for response costs. The court disagrees.

Under CERLCA, EPA has the authority to create and adopt a remediation plan. *See* 42 U.S.C. § 9617. While EPA has not yet adopted a final remediation plan for the Site, EPA's proposed remediation plan uses the residential standards for lead and arsenic as its remediation levels. [PCS Ex. 216 at 60]. EPA's proposed remediation plan includes remediation of RHCE's parcel because it is contaminated with lead and arsenic above the residential standards. [PCS Ex. 120 at 3; PCS Ex. 226 at PCS002_002580-81; PCS Ex. 227 at A 00287, A 00292, Fig 3-3a & 3-4a]. Regardless of the RHCE parcel's zoning classification, EPA has the authority to decide and has decided that RHCE's parcel requires remediation. 42 U.S.C. § 9617.

ii. Whether RHCE is a PRP

RHCE argues that it cannot be held liable for contribution under CERCLA § 113 because it does not fall into any of the four categories of PRPs listed in 42 U.S.C. § 9607(a), CERCLA § 107(a). RHCE specifically argues that 1) it is a lessee, not an owner of the property; and 2) it cannot be held liable as an operator of the property because no release of a hazardous substance occurred on its parcel during its tenancy.

In making its contribution claim against RHCE under § 113(f) of CERCLA, PCS must prove that RHCE is a responsible party under § 107(a) of CERCLA and demonstrate RHCE's equitable share of costs. *Minyard Enter., Inc. v. Se. Chem. & Solvent Co.*, 184 F.3d 373, 385 (4th Cir. 1999). The four categories of PRPs under CERCLA are:

- (1) the owner and operator of a facility;⁶
- (2) any person who at the time of disposal of any hazardous substance owned or operated any facility at which hazardous substances were disposed of;
- (3) any person who, by contract, agreement, or otherwise, arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substances owned or possessed by such person, by any other party or entity, at any facility owned or operated by another party or entity and containing such hazardous substances; and
- (4) any person who accepts, or accepted, any hazardous substances for transport to disposal or treatment facilities, incineration vessels, or sites selected by such person.

42 U.S.C. § 9607(a)(1)-(4) (CERCLA § 107(a)(1)-(4)). RHCE is currently a lessee of two acres of land on the Site. Thus, the issue is whether RHCE is an "owner" or "operator" under CERCLA § 107(a)(1) or (2). The statutory definition of "owner and operator" refers to "any person owning or operating [a] facility." 42 U.S.C. § 9601(20)(A).

Several district courts have found that lessees can be held liable as owners of facilities. *See, e.g., Louisiana v. Braselman Corp.*, 78 F. Supp. 2d 543, 551 (E.D. La. 1999) ("Even though [defendant] did not have title to the property, [defendant] was a lessee who asserted control over the property, and, as such, was an 'owner' under CERCLA § 107(a)(1)."); *Burlington N. Ry. Co. v. Woods Indus., Inc.*, 815 F. Supp. 1384, 1391-92 (E.D. Wash. 1993) ("Since [defendant] asserted

⁵ Although § 9607(a)(1) (CERCLA § 107(a)(1)) is written in the conjunctive, it has been interpreted in the disjunctive. *See, e.g., Long Beach Unified Sch. Dist. v. Dorothy B. Godwin California Living Trust*, 32 F.3d 1364, 1367 (9th Cir. 1994); *Commander Oil Corp. v. Barlo Equip. Corp.*, 215 F.3d 321, 328 (2d Cir. 2000) (stating that "owner" liability and "operator" liability are "two statutorily distinct categories of potentially responsible parties.").

control over the use of the property, [defendant] is an ‘owner’ for purposes of CERCLA § 107(a)(1) even though it is only a lessee.”); *Pape v. Great Lakes Chem. Co.*, No. 93 C 1585, 1993 WL 424249 (N.D. Ill. Oct. 19, 1993) (“. . . the lessee of a site where a release or threatened release of hazardous substances occurred is considered the ‘owner’ for purposes of CERCLA liability.”); *United States v. South Carolina Recycling and Disposal, Inc.*, 653 F. Supp. 984, 1003 (D.S.C. 1986) (holding that a lessee that operated a landfill was an “owner” under CERCLA because the lessee “had control over and responsibility for, the use of the property and, essentially, stood in the shoes of the property owner”). However, the Second Circuit in addressing this issue stated: “while the imposition of liability [on lessees] is surely correct, imposing owner liability instead of operator liability threatens to conflate two statutorily distinct categories of potentially responsible parties.” *See Barlo*, 215 F.3d at 328. The court agrees with the Second Circuit that interpreting lessees as owners for the purposes of CERCLA makes CERCLA’s imposition of liability on operators redundant and is contrary to the intention of the drafters of CERCLA. Thus, RHCE, as a lessee, is not an “owner” for the purpose of imposing liability under CERCLA.

The court next considers whether RHCE is an “operator” for the purpose of imposing liability under CERCLA. In *United States v. Bestfoods*, 524 U.S. 51 (1998), the Supreme Court addressed the issue of whether parent corporations could be held liable under CERCLA for operating facilities that appeared to be under the control of subsidiaries, and clarified when a party can be held liable as an “operator” under CERCLA § 9607(a)(2). *See id.* at 65-67. The Court stated: “under CERCLA, an operator is simply someone who directs the workings of, manages, or conducts the affairs of a facility.” *Bestfoods*, 524 U.S. at 66. The Court went on to state that because of “CERCLA’s concern with environmental contamination, an operator must manage, direct, or conduct operations

specifically related to pollution, that is, operations having to do with the leakage or disposal of hazardous waste, or decisions about compliance with environmental regulations.” *Id.* at 66-67.

The *Bestfoods* decision does not make clear whether the requirement that an operator must conduct operations related to pollution applies also to § 9607(a)(1). At least two federal courts have interpreted *Bestfoods* to require that all operators held liable for response costs under CERCLA must have conducted operations related to pollution. *See Barlo*, 215 F.3d at n.3 (stating that under no version of facts could the defendant be an operator under § 9607(a)(1) [CERCLA § 107(a)(1)] because it did not manage, direct or conduct operations specifically related to pollution); *United States v. Newmont U.S.A. Ltd.*, No. CV-05-020-JLQ, 2007 WL 2477361, at *2 (E.D. Wash. Aug. 28, 2007) (finding that the *Bestfoods* interpretation of operator liability applies to both CERCLA § 107(a)(1) and (2)).

The District Court of Maryland, however, found that operators under § 9607(a)(1) need not conduct operations related to pollution, stating: “As a current owner and operator of the site where hazardous substances have been released, [the plaintiff] is itself a potentially responsible party (PRP), even if [the plaintiff] did not own the property at the time the hazardous waste disposal occurred.” *Sherwin-Williams Co. v. ARTRA Grp., Inc.*, 125 F. Supp. 2d 739, 745 (D. Md. 2001) (citing 42 U.S.C. § 9607(a)(1); *Trinity Amer. Corp. v. EPA*, 150 F.3d 389, 395 (4th Cir. 1998)); *see also New Jersey Turnpike Auth. v. PPG Indus., Inc.*, 16 F. Supp. 2d 460 (D.N.J. 1998) (“Compare CERCLA, 42 U.S.C. § 9607(a)(1) and (2) (including in its definition of PRP both the person who owned or operated the facility at the time of the disposal of a hazardous substance and the current owner or operator of a facility, regardless of when the disposal took place).”) (decided prior to *Bestfoods*).

The Fourth Circuit's ruling in *Trinity Amer. Corp. v. EPA*, 150 F.3d 389, 395 (4th Cir.1998), indicates that CERCLA § 107(a)(1) does not require a disposal of hazardous materials by a current operator for liability to be imposed. In *Trinity*, a case decided after the *Bestfoods* decision, the Fourth Circuit stated that current owners need not have owned the property when pollution took place. *Id.* at 395. This implies that the same is true of current operators because they are listed in the same statutory category, § 9607(a)(1). There is no reason to distinguish between current owners and current operators when it comes to the extent of liability. The court finds that current operators of a CERCLA facility need not direct operations related to pollution to be held liable for response costs under CERCLA § 107(a)(1). *See* § 9607(a)(1). The court's conclusion is consistent with the mandate that courts construe CERCLA's provisions broadly to avoid frustrating the remedial purpose of the statute. *See Westfarm Assoc. Ltd. P'ship v. Washington Suburban Sanitary Comm'n*, 66 F.3d 669, 677 (4th Cir. 1995) ("CERCLA is a comprehensive remedial statutory scheme, and [] the courts must construe its provisions liberally to avoid frustrating the legislature's purpose.").

Pursuant to *Bestfoods*, CERCLA § 107(a)(2), unlike § 107(a)(1), requires that a former operator direct operations related to pollution. 524 U.S. at 66-67. This distinction from § 107(a)(1) conforms with the text of CERCLA because in order for a party to be liable for response costs under § 107(a)(2), it must have owned or operated the facility "at the time of disposal of any hazardous substance." 42 U.S.C. § 9607(a)(2); *see also Nurad, Inc. v. William E. Hooper & Sons Co.*, 966 F.2d 837, 842 (4th Cir. 1992) (a tenant can be held liable as "operator" under CERCLA § 107(a)(2) if it had "authority to control operations or decisions involving the disposal of hazardous substances at the Site" whether or not it exercised that authority).

The court turns to the issue of whether RHCE is a current "operator" of the Site and therefore

a PRP. The record indicates that RHCE operates a drop yard on the Site. Because RHCE directs the day-to-day workings of the parcel it leases, RHCE is a current operator of the Site pursuant to CERCLA § 107(a)(1) and is a PRP.

In addition, under CERCLA § 107(a)(2), RHCE can be held liable as an operator of the Site at a time when the disposal of hazardous wastes occurred. The term “disposal” means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

42 U.S.C. § 6903(3); 42 U.S.C. § 9601(29). The Fourth Circuit has ruled that “§ 9607(a)(2) imposes liability not only for active involvement in the ‘dumping’ or ‘placing’ of hazardous waste at the facility, but for ownership of the facility at a time that hazardous waste was ‘spilling’ or ‘leaking.’” *Nurad*, 966 F.2d at 846. Disposals are not limited to one-time occurrences, but instead include times when hazardous materials are moved or dispersed. *See Tanglewood E. Homeowners v. Charles-Thomas, Inc.*, 849 F.2d 1568, 1573 (5th Cir. 1988); *Kaiser Aluminum & Chem. Corp. v. Catellus Dev. Corp.*, 976 F.2d 1338, 1342 (9th Cir. 1992). Specifically, “a ‘disposal’ may occur when a party disperses contaminated soil during the course of grading and filling a construction site.” *Redwing Carriers, Inc. v. Saraland Apartments*, 94 F.3d 1489, 1511-12 (11th Cir. 1996).

The RHCE parcel is currently contaminated with lead and arsenic above EPA’s proposed residential remediation levels. [PCS Ex. 120 at 3; PCS Ex. 216 at A 00861; PCS Ex. 226 at PCS002_002580-81; PCS Ex. 227 at A 00287, A 00292, Fig 3-3a & 3-4a; Trial Tr. 672:17-673:2, 1875, 1879:20-1880:24, 1597:4-9]. Black and Veatch’s final feasibility study indicates that most of the RHCE property will need to be remediated due to arsenic contamination. [PCS Ex. 226 at PCS002_002580-81]. In 1991, RCHE commissioned the construction of a detention pond, two

asphalt driveways, and grading and proof rolling of the parcel. Because the majority of the RHCE parcel is currently contaminated, the court finds that the construction work commissioned by RHCE spread the contamination on the Site and that such action constitutes a “disposal” under CERCLA. Thus, RHCE is a PRP pursuant to CERCLA § 107(a)(2). RHCE’s Motion for Judgment on Partial Findings [Entry 521] is **denied**.

B. Ashley’s CERCLA § 107(a) Claim

“Congress enacted CERCLA to protect public health and the environment from inactive hazardous waste sites.” *Westfarm Assoc. Ltd. P’ship v. Washington Suburban Sanitary Comm’n*, 66 F.3d 669, 677 (4th Cir. 1995) (citing H.R. Rep. No. 1016(I), 96th Cong., 2d Sess. 1 (1980), reprinted in 1980 U.S.C.C.A.N. 6119, 6119). “CERCLA is a comprehensive remedial statutory scheme, and [] the courts must construe its provisions liberally to avoid frustrating the legislature’s purpose.” *Westfarm*, 66 F.3d 669, 677 (4th Cir. 1995). CERCLA actions can be brought by the government or by private parties. *See* 42 U.S.C. § 9607(a).

To succeed in its claim against PCS under § 107(a) of CERCLA, Ashley must prove the following: 1) that the defendant [PCS] falls within one of the four classes of persons subject to CERCLA liability, 42 U.S.C. § 9607(a); 2) that a CERCLA “facility” exists, 42 U.S.C. § 9601(9); 3) that a “hazardous substance” has been “released” (or threatens to be released) from the defendant’s facility, 42 U.S.C. §§ 9601(14), (22); 42 U.S.C. § 9607(a)(4); and 4) that the release or threatened release has caused the plaintiff to incur response costs that are “‘necessary’ and ‘consistent with the national contingency plan,’” 42 U.S.C. § 9607(a)(4).

The term “hazardous substance” is defined in the Act as any substance that appears on any one of six statutory lists of substances. *See* 42 U.S.C. § 9601(14). Based on sampling and analysis

conducted by Ashley, PCS, and EPA, “hazardous substances,” as defined pursuant to § 101(14) of CERCLA, 42 U.S.C. § 9601(14), including but not limited to, arsenic and lead, are present in the soil and groundwater at the Site. 40 C.F.R. § 302.4, Table at 50. A “facility” is “any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located.” 42 U.S.C. § 9601(9). Because there are hazardous materials on the Site, the Site is a “facility” as defined by CERCLA.

As was previously noted, the list of PRPs includes “any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of.” 42 U.S.C. § 9607(a)(2). The record makes clear that CNC, predecessor to PCS, released arsenic and lead on the Site. Thus, PCS is a “person” subject to CERCLA liability because it is the successor of a corporation that owned and operated the facility when hazardous substances were disposed of. Entry 118 (PCS found to be successor to CNC; *United States v. Carolina Transformer Co.*, 978 F.2d 832, 837 (4th Cir. 1992)).

To recover response costs, Ashley must show that its claimed response costs were “necessary” and “consistent with the national contingency plan [NCP].” 42 U.S.C. § 9607(a)(4)(B). “Costs are ‘necessary’ if incurred in response to a threat to human health or the environment.” *IIIT Indus., Inc. v. Borgwarner, Inc.*, File No. 1:05-CV-674, 2010 WL 1172533, at *26 (W.D. Mich. Mar. 24, 2010) (citing *Reg'l Airport Auth. of Louisville v. LFG, LLC*, 460 F.3d 697, 703 (6th Cir. 2006)). Ashley’s response costs in this case, which involved conducting Site assessments and submitting a remediation plan to EPA, were necessary to protect human health and the environment. The record demonstrates that the acidic conditions on the property and the presence of arsenic and lead are harmful to the environment and pose a danger to human health.

A response action is “consistent with the NCP” if the action is in “substantial compliance” with 40 C.F.R. § 300.700(c)(5)-(6), and results in a “CERCLA-quality cleanup.” 40 C.F.R. § 300.700(c)(3)(I). “An ‘immaterial or insubstantial’ deviation, however, will not result in a cleanup that is ‘not consistent’ with the NCP.” *IIIT Indus.*, 2010 WL 1172533, at * 26 (citing 40 C.F.R. § 300.700(c)(4)). Litigation-related costs are not recoverable under CERCLA. *Young v. United States*, 394 F.3d 858, 865 (10th Cir. 2005); *Ellis v. Gallatin Steel Co.*, 390 F.3d 461, 482 (6th Cir. 2004); *Dedham Water Co. v. Cumberland Farms Dairy, Inc.*, 972 F.2d 453, 461 (1st Cir. 1992). “Costs otherwise necessary and consistent with the NCP may be unrecoverable if the steps taken were extravagant or otherwise unreasonably costly.” *Nw. Mut. Life Ins. Co. v. Atl. Research Corp.*, 847 F. Supp. 389, 401 (E.D. Va. 1994).

The court has reviewed the submissions of Ashley in pursuing the remediation of the property. Ashley has separated out its litigation costs and does not seek recovery of these expenditures. [See Ash. Ex. 247]. The court finds that the past response costs incurred by Ashley were consistent with the NCP and were reasonable. [Ash Ex. 227; Trial Tr. 176:18-24, 584:25-587:2, 611:7-615:3, 1295:11-1296:7]. The court finds that Ashley is entitled to recover its past response costs. With regard to future response costs, the court notes that there is no final remediation plan for the Site that has been approved by EPA. However, a government-approved remediation plan is not a prerequisite for the court’s entry of an order allocating liability allocation. *Dent*, 993 F. Supp. at 949. To the extent that it later becomes disputed whether the final remediation plan for the Site is consistent with the NCP, the court will retain jurisdiction over the case to decide this issue.

C. Divisibility of Harm

Liability under CERCLA § 107(a) is joint and several if the harm is indivisible. *United States v. Monsanto Co.*, 858 F.2d 160, 171 (4th Cir. 1988). Divisibility is a legal defense to joint and several liability under CERCLA in which a party makes “a causation-based argument that the cleanup costs at a single CERCLA facility should be divided between [a defendant] and another responsible party.” *IIT Indus.*, 2010 WL 1172533, at *24. PCS seeks a court finding that the harm at the Site is divisible. The burden is on PCS in seeking to avoid joint and several liability to prove that a reasonable basis for apportionment of the remediation costs exists. *Burlington Northern*, 129 S. Ct. 1870, 1880-81 (2009).

The scope of liability under CERCLA § 107, 42 U.S.C. § 9607, is determined from “traditional and evolving principles of common law.” *United States v. Chem-Dyne Corp.*, 572 F. Supp. 802, 808 (S.D. Ohio 1983); *see also Burlington Northern*, 129 S. Ct. at 1881. “The universal starting point for divisibility of harm analyses in CERCLA cases is § 433A of the Restatement (Second) of Torts.” *Burlington Northern*, 129 S. Ct. at 1881 (internal citations omitted).

Under the Restatement, “when two or more persons acting independently caus[e] a distinct or single harm for which there is a reasonable basis for division according to the contribution of each, each is subject to liability only for the portion of the total harm that he has himself caused. . . . But where two or more persons cause a single and indivisible harm, each is subject to liability for the entire harm.

Burlington Northern, 129 S. Ct. at 1881 (citing Restatement (Second) of Torts, §§ 433A, 881 (1976)).⁷ Comment d to § 433A of the Restatement (Second) of Torts indicates that some harms are capable of division on a reasonable and rational basis when the evidence provides a divisor over

⁷While comment c to § 875 of the Restatement indicates that a plaintiff must prove that each defendant was a “substantial factor” in causing a single harm in order for joint and several liability to attach, courts have not imposed this requirement in CERCLA cases due to “inconsistency with CERCLA’s relaxed causation requirement.” *See United States v. Atchison, Topeka & Santa Fe Ry. Co.*, Nos. CV-F-92-5068 OWW, CV-F-96-6226 OWW, CV-F-96-6228, 2003 WL 25518047, at *82 (E.D. Cal. July 15, 2003).

which the harm can be divided.⁸ Steve C. Gold, *Dis-Jointed? Several Approaches to Divisibility After Burlington Northern*, 11 Vt. J. ENVTL. L. 307, 332 (2009) (Restatement (Second) of Torts, § 433A cmt. d).

Not all harms can be apportioned. *Burlington Northern*, 129 S. Ct. at 1881. A party invoking the doctrine of divisibility is required to show that “(a) there are distinct harms, or (b) there is a reasonable basis for determining the contribution of each cause to a single harm.” *IIT Indus.*, 2010 WL 1172533, at *24; *see also Burlington Northern*, 129 S. Ct. at 1881 (citing Restatement (Second) of Torts § 433A(1)(b) at 434 (1963-1964)).

Proving divisibility of harm at a CERCLA site in accordance with the Restatement approach can be difficult because of “the commingling of wastes, the migration of contamination over time, and other complex fact patterns.” 8 Bus. & Com. Litig. Fed. Cts. § 95:24 (2d ed.) (citing *United States v. Ottati & Goss, Inc.*, 630 F. Supp. 1361 (D.N.H. 1985)). “Where causation is unclear, courts should not hasten to ‘split the difference’ in an attempt to achieve equity. Courts lacking a reasonable basis for dividing causation should avoid apportionment altogether by imposing joint and several

⁸ Section 443 A, comment d states:

There are other kinds of harm which, while not so clearly marked out as severable into distinct parts, are still capable of division upon a reasonable and rational basis, and of fair apportionment among the causes responsible. Thus where the cattle of two or more owners trespass upon the plaintiff's land and destroy his crop, the aggregate harm is a lost crop, but it may nevertheless be apportioned among the owners of the cattle, on the basis of the number owned by each, and the reasonable assumption that the respective harm done is proportionate to that number. Where such apportionment can be made without injustice to any of the parties, the court may require it to be made. Such apportionment is commonly made in cases of private nuisance, where the pollution of a stream, or flooding, or smoke or dust or noise, from different sources, has interfered with the plaintiff's use or enjoyment of his land. Thus where two or more factories independently pollute a stream, the interference with the plaintiff's use of the water may be treated as divisible in terms of degree, and may be apportioned among the owners of the factories, on the basis of evidence of the respective quantities of pollution discharged into the stream.

liability.” *Atchison*, 2003 WL 25518047, at *84 (citing *United States v. Hercules, Inc.*, 247 F.3d 706, 718-19 (8th Cir. 2001); *United States v. Township of Brighton*, 153 F.3d 307, 319 (6th Cir. 1998)); see also *Burlington Northern*, 129 S. Ct. at 1881 (citing Restatement (Second) of Torts § 433A, cmt. i. at 440 (1963-1964)) (when two or more causes produce a single, indivisible harm, “courts have refused to make an arbitrary apportionment for its own sake, and each of the causes is charged with responsibility for the entire harm.”).⁹

The divisibility issue presents an intensely factual analysis. See *Alcan*, 964 F.2d at 269. Divisibility can be based on a variety of factors including volumetric, chronological, or geographic considerations, as well as contaminant-specific considerations. *IIT Indus.*, 2010 WL 1172533. (citing *Burlington Northern*, 129 S. Ct. at 1883). Equitable considerations are not taken into account in the apportionment analysis. *Burlington Northern*, 129 S. Ct. at 1882 & n.9.

Prior to the Supreme Court’s ruling in *Burlington Northern*, the burden of proving divisibility was considered high and defendants were rarely successful establishing this defense. See, e.g., *United States v. Capital Tax Corp.*, 545 F.3d 525, 535 n.9 (7th Cir. 2008) (“[D]ivisibility is a ‘rare scenario.’”); *Control Data Corp. v. S.C.S.C. Corp.*, 53 F.3d 930, 934 n.4 (8th Cir. 1995) (stating that it is difficult to establish that harm is divisible); *Matter of Bell Petroleum Servs., Inc.*, 3 F.3d 889, 901 (5th Cir. 1993)(defendants “rarely succeed” in proving a reasonable basis for apportionment); *Alcan*, 964 F.2d at 269 (“Alcan’s burden in attempting to prove the divisibility of harm . . . is substantial, and the analysis will be factually complex. . . .”); *O’Neil v. Picillo*, 883 F.2d 176, 178-79 (1st Cir. 1989) (“[P]ractical effect of placing the burden on defendants has been that responsible

⁹Comment i to § 433A indicates that certain kind of harms are incapable of reasonable division and that courts should not make arbitrary apportionments in such cases. Restatement (Second) of Torts, § 433A, cmt. i. As examples of such harms, Comment i lists death, a broken leg, the destruction of a house by fire, and the sinking of a barge.

parties rarely escape joint and several liability"); *United States v. Washington State Dep't of Transp.*, No. C05-5447RJB, 2007 WL 445972, at *26 (W.D. Wash. 2007)(burden of providing a reasonable basis for apportioning harm is high). In May of 2009, however, the Supreme Court reinstated a district court's finding of divisibility after a reversal by the Ninth Circuit on this issue. *Burlington Northern*, 129 S. Ct. at 1882-83. The Supreme Court found that a "rough calculation" based on percentages of land area, time of ownership, and types and amounts of hazardous materials requiring remediation, including a fifty percent margin of error was supported by the record and sufficiently reasonable to provide a reasonable basis for apportionment. *Id.* at 1882-83.

Some legal commentary and case law have interpreted *Burlington Northern* to lessen the burden on defendants seeking to avoid joint and several liability by demonstrating a reasonable basis for apportionment. See *Superfund and Natural Res. Damages Litig.*, 2009 ABA Env't Energy & Resources L.: Year in Rev. 132; ABA Envtl, Energy, and Res. Law: The Year in Review, Environmental Committee, at 138 (2009) (*Burlington Northern* "essentially lowered the evidentiary standard for divisibility."); Kevin A. Gaynor, Benjamin S. Lippard, Sean M. Lohnquist, *Unresolved CERCLA Issues After Atlantic Research and Burlington Northern*, SR053 ALI-ABA 77, 91 (2010) (stating that the Supreme Court in *Burlington Northern* rejected the approach making it nearly impossible for a CERCLA PRP to demonstrate divisibility and expanded the situations in which divisibility will allow CERCLA litigants to avoid joint and several liability); *Reichhold, Inc. v. United States Metals Ref. Co.*, No. 03-453(DRD), 2009 U.S. Dist. LEXIS 52471, at *131-33 (D.N.J. 2009) (apportioning liability for the single harm of metals contamination on a portion of property when two causes of the contamination were both sufficient to require the proposed remediation).

In *United States v. Iron Mountain Mines, Inc.*, No. 91-0768-JAM-JFM, 2010 WL 1854118

(E.D. Cal. May 6, 2010), however, the District Court for the Eastern District of California found that *Burlington Northern* was not a change in the law, but simply a reiteration of established law applied to the specific facts of the case before the Court. *Id.* at 3. The *Iron Mountain* court also stated that *Burlington Northern* did not mandate that district courts apportion harm. *Id.* The court concurs with the *Iron Mountain Mines* court that *Burlington Northern* did not change the law with regard to divisibility, but merely recognized a reasonable basis for apportionment based on the facts of a particular case.

The court finds that the contamination of the Site, which has caused the need for remediation constitutes a single harm. *See United States v. Monsanto Co.*, 858 F.2d 160, 172-73 (4th Cir. 1988) (finding that environmental contamination on a piece of property requiring remediation constitutes a single harm). The remedy selected by EPA to clean up the contaminated soil and sediments at the Site involves excavation and off-site disposal. The volume of contaminated soil is directly related to how much the remediation is going to cost. [Trial Tr. 701:6-11]. The predominant factors that contribute to the volume of contaminated soil and thus drive the cost of the remediation are the volume of hazardous materials and the spread of these hazardous materials throughout the Site. [Ash. Ex. 162 at 12; Trial Tr. 812:6-11, 1587:9-15, 1943:11-15]. The question becomes, then, whether the harm at the Site is divisible based upon how much contamination each party contributed to the Site and how much soil each party caused to be included in the remediation by spreading the contamination throughout the Site. In an attempt to meet its burden of demonstrating divisibility, PCS presented the court with a total of five proposed methods of apportionment. In determining whether the harm at the Site is divisible, the court will address each of PCS's proposals and will consider any other possible bases for apportionment contained in the record.

1. Method 1

PCS's first method of apportionment is based upon the amount of fill or other material added to the Site during each ownership period. PCS's expert Grip used aerial photography to calculate the amount of material added to the Site as of certain dates and used these calculations to allocate shares of the remediation cost to Ross, PCS, and the Holcombe and Fair Parties. Grip then allocated shares of responsibility to RHCE and Allwaste based upon the size of their parcels and the amount of ROC to be removed.

The court finds that this method does not provide a reasonable basis for apportionment. PCS has not shown a reasonable relationship between the addition of material to the Site and the spread of contamination on the Site. No evidence has been presented to the court indicating that all new material identified in aerial photography was contaminated. Furthermore, the aerial photography presented to the court does not detect contamination. This method also fails to take into account the spread of contamination already present on the Site to new areas of the Site, which is one of the main factors contributing to the cost of the remediation. A method that does not take both of the main factors that have contributed to the cost of the remediation into account does not reasonably account for the harm at the Site.

The court also notes that Grip changed his methodology in the middle of his analysis to assign shares of the allocation to RHCE and Allwaste. [*Cf.* PCS Ex. 4A; Trial Tr. 2369:12-15]. This change in methodology appears to hold more than one party accountable for the some of the same remediation costs. Because Grip's change in methodology results in double counting of some remediation costs, the court does not accord great weight to Grip's calculations. PCS's first method of apportionment is not reasonable.

2. Method 2

PCS's second method of apportionment is based upon the volume of contaminants introduced to the Site. PCS argues that data in the record allows the court to determine the approximate amount of arsenic and lead Ross and CNC each contributed to the Site. The court finds, however, that this method of apportionment is not a reasonable basis for apportionment in this case for three reasons. First, the record indicates that much of the remediation in this case is necessary because of the spread of the contamination throughout the Site through earthmoving and other development activities. As previously stated, an apportionment that fails to take into account the spread of contamination is not reasonable on the facts of this case. Second, the presence of other phosphate fertilizer plants operating in the area of the Site before Planters began operations indicates that volumetric calculations may overstate the amount of pyrite slag Planters introduced to the Site. The record shows that pyrite slag was used as fill and for road stabilization around the turn of the century, indicating that pyrite slag may have been present on the Site prior to Planters' ownership. Third, Grip withdrew his volumetric calculations at trial because they were inaccurate. [Trial Tr. 2118:1-13].

3. Method 3

PCS's third method of apportionment is based upon the period of time Planters and CNC each operated the fertilizer plant. The court finds that although this method of apportionment was part of the court's analysis in *Burlington Northern*, it is not reasonable based upon the facts in this case. First, apportioning the amount of contaminants based upon years of operations without data on the approximate production levels of the fertilizer plant during these years could result in an apportionment that is not reasonably accurate. While the record makes clear that Planters operated

the fertilizer plant for many more years than CNC, Planters owned the plant during the Great Depression, indicating that production levels may have been low during some years. Apportioning harm based upon years of operation without data on the approximate production levels throughout the years would be unreasonable.

Second, while this method takes into account the introduction of lead, arsenic, and acid to the Site, it fails to take into account the subsequent spread of the contamination at the Site. Because the spread of the contamination is a major factor driving the remediation, the failure to take this factor into account makes this method of apportionment is unreasonable.

4. Method 4

PCS's fourth method of apportionment is based upon an analysis of the parties who first physically disturbed the different portions of the remediation area. Grip used aerial photography to determine which party first engaged in filling, grading, or other development activities on the Site. Grip then used this information to determine the percent of the remediation area attributable to each party. [PCS Ex. 4A].

The court finds that PCS's fourth method of apportionment also fails to provide a reasonable basis for apportionment. First, this method fails to take into account the original sources of the contaminants, which is one of the driving factors of the remediation. Second, the use of aerial photography to determine when areas of the Site were first impacted by contamination is problematic because aerial photography cannot show when contaminants were moved across the Site; it can only show when earthmoving activities took place. Third, analyzing areas of first impact does not take into account the *volume* of soil affected by earthmoving activities. Subsequent, more invasive, earthmoving activities in an area where earthmoving has already occurred may disturb a greater

volume of soil, which would not be taken into account in this calculation. The court finds that PCS's fourth method of apportionment is not reasonable.

5. Method 5

At trial, PCS argued that the court could apportion liability using Kristen Stout's ("Stout") analysis in which she identified all of the contaminated soil samples at the Site she believed were potentially impacted by CNC. [Ash. Ex. 226; Trial Tr. 1136:6-9]. The court finds that this method is not a reasonable basis for apportionment because the number of contaminated soil samples that Stout attributes to CNC is not reasonably related to the volume of contaminated soil on the Site. No evidence has been presented to the court as to why the number of soil samples taken on the Site is a reasonable proxy for the total volume of contaminated soil.

6. Conclusions With Regard to Divisibility

While the harm at the Site is theoretically divisible based upon: 1) how much contamination each party contributed to the Site, and 2) how much soil each party caused to be included in the remediation area by spreading the contamination throughout the Site, the court finds that the record does not provide the court with a reasonable basis for apportioning this harm.

Although PCS attempted to provide the court with a reasonable basis for determining the volume of contaminants introduced to the Site by Planters and CNC, these calculations were withdrawn at trial because they were inaccurate. [Trial Re. 2118:1-2119:8]. However, even if the court had reasonably accurate calculations of the volume of contaminants released on the Site by Planters and CNC, this is only half of the equation; the other main factor contributing to the cost of the remediation is the spread of contamination across the Site. PCS has attempted to provide the court with a basis for determining the spread of contamination by calculating the amount of new

material added to the Site by each party and by analyzing when each part of the Site was first impacted by earthmoving activities. Neither of these calculations, however, provides a reasonable estimate of the additional volume of soil contaminated by earthmoving and development activities. First, there is no way of knowing whether the new material added to the Site, which was identified through aerial photography, was contaminated. Second, looking only at areas of first impact does not take into account subsequent, more invasive impacts that increased the depth of contamination at the Site.

While the record reveals that construction and earthmoving activities occurred throughout the history of the Site, the information in the record provides the court with no reasonable basis for determining how much each party contributed to the volume of contaminated soil through such activities. Without a divisor over which to apportion the spread of contamination across the Site, the court cannot reasonably apportion the cost of remediating the Site among the parties. In addition, evidence in the record suggests that the acidic (low pH) conditions on the Site led to the migration of lead and arsenic through the soil. This consequence of commingling contaminants on the Site indicates that the volume of hazardous materials and the amount of earthmoving and construction activities on the Site do not have a direct cause/effect relationship with the amount of harm at the site. *See Monsanto Co.*, 858 F.2d at 172-73 (finding that the volume of contaminants deposited on a site was not a reasonable basis for apportionment when no evidence of the characteristics of the contaminants and how they might interact was introduced). The court finds that there is no reasonable basis for apportioning the harm at the Site and that therefore the harm at the Site is indivisible. Thus, the court will address the parties' contribution claims.

D. Contribution

1. Introduction

Title 42, United States Code, Section 9613(f) enables “[a]ny person [to] seek contribution from any other person who is liable or potentially liable under section 9607(a) [CERCLA § 107(a)] of this title, during or following any civil action under section 9606 of this title or under section 9607(a) of this title.” 42 U.S.C. § 9613(f) (CERCLA § 113(f)). A party making a claim under CERCLA § 113(f) bears the burden of proving: 1) that the defendant is a responsible party under § 107(a) of CERCLA; and 2) the defendant’s equitable share of costs. *Minyard*, 184 F.3d at 385. With regard to responsibility under § 107(a), the Court has already determined that the Site is a “facility,” that there has been a release of a hazardous substance at the facility, and that the releases have caused Ashley to incur response costs. Thus, PCS need only prove that each party being sued for contribution is a PRP. *IIIT Indus.*, 2010 WL 1172533, at *35.

Contribution claims require courts to make an equitable allocation of responsibility among the liable parties. *IIIT Indus.*, 2010 WL 1172533, at 37. In enacting the contribution section of CERCLA, Congress was concerned “that the relative culpability of each responsible party be considered in determining the proportionate share of costs each must bear.” *Monsanto*, 858 F.2d at 173 & n.29.

In resolving a contribution claim, the court allocates response costs among the liable parties using such equitable factors as it deems appropriate. 42 U.S.C. § 9613(f); *see also Weyerhaeuser Co. v. Koppers Co., Inc.*, 771 F. Supp. 1420, 1426 (D. Md. 1991); *Dent*, 993 F. Supp. 923. The Gore Factors are six equitable factors derived from the legislative history of CERCLA that are relevant in most CERCLA cases. *Dent*, 993 F. Supp. at 950. The Gore Factors are: 1) the ability of the parties to demonstrate that their contribution to a discharge, release, or disposal of a hazardous waste

can be distinguished; 2) the amount of hazardous waste involved; 3) the toxicity of the hazardous waste involved; 4) the degree of involvement by the parties in the generation, transportation, treatment, storage, or disposal of the hazardous waste, especially waste driving the remediation; 5) the degree of care exercised by the parties with respect to the hazardous waste concerned, taking into account the characteristics of such hazardous waste; and 6) the degree of cooperation by the parties with Federal, State, or local officials to prevent harm to the public health or the environment. *Dent*, 993 F. Supp. at 950. Other courts have also considered: 1) the economic benefit to each party associated with releases of hazardous wastes, and 2) each party's ability to pay its share of the cost. See *Weyerhaeuser*, 771 F. Supp. at 1427; *United States v. Davis*, 31 F. Supp. 2d 45, 63 (D.R.I. 1998). Liability under § 113(f) is several, not joint and several. *Minyard*, 184 F.3d at 385. The court will proceed by considering the defenses raised by each party and weighing the equitable factors it deems relevant with respect to each liable party's equitable share. Then, taking all of this information into account, the court will allocate the past and future response costs for the remediation among the liable parties.

2. Ross

PCS must demonstrate that Ross is a PRP under § 107(a) of CERCLA and prove Ross's equitable share of costs. *Minyard*, 184 F.3d at 385. As was previously noted, the categories of responsible parties include "any [party] who at the time of disposal of any hazardous substance owned or operated any facility at which hazardous substances were disposed of." 42 U.S.C. § 9607(a)(2). Planters was the owner and operator of the fertilizer plant on the Site from 1906-1966. The evidence in this case shows that Planters disposed of hazardous wastes on the Site when it dumped pyrite slag on the Site and cleaned out the lead acid chambers. As the successor to Planters,

Ross is subject to CERCLA liability under 42 U.S.C. § 9607(a)(2). *See Carolina Transformer Co.*, 978 F.2d at 832.

Ross urges the court to take into account its alleged inability to pay a judgment in determining its equitable share of the response costs. Ross argues that as a dissolved corporation, it has no readily-available assets.

An orphan share is created when a party otherwise qualifying as a responsible party under CERCLA is “defunct, bankrupt, uninsured, or otherwise lacks[] the resources to bear its ideal measure of responsibility in monetary terms.” *Newmont*, 2008 WL 4621566, at *62 (quoting *United States v. Kramer*, 953 F. Supp. 592, 595 (D.N.J. 1997)). When a so-called orphan share exists, a court may take this fact into account to increase the equitable share of others. *Id.* However, when the record does not make clear that a party is defunct, bankrupt, uninsured, or otherwise lacking of resources, courts have declined to take ability to pay into account in determining the equitable allocation among the parties. *See id.* The court concludes that it is not clear from the record that Ross will be unable to pay any share allocated to it. Ross has a case pending against its insurers, for coverage of any liability imposed in this suit. *See Ross Dev. Corp. v. Firemans Fund Ins. Co.*, 2:08-CV-03672-MBS. Also, there are cases pending against the Ross Directors and shareholders that seek to disgorge distributions made by Ross prior to dissolution.¹⁰ These cases may make funds available to pay any judgment entered against Ross. In addition, the court finds that the existence of any orphan share is irrelevant for the purposes of allocation in light of evidence that Ross took steps to make itself judgment proof. *See supra ¶¶ 44-48.* The court will not take Ross’s alleged

¹⁰In *PCS Nitrogen, Inc. v. Buhrmaster et al.*, 2008-CP-10-5269, S.C. Court of Common Pleas, PCS has sued the Ross shareholders under South Carolina’s dissolution statute for disgorgement of assets distributed by Ross. In *PCS Nitrogen, Inc. v. Ross Dev. Corp.*, 2:09-CV-03171-MBS, PCS has sued the Ross Directors alleging claims for fraudulent conveyance, civil conspiracy, and breach of fiduciary duty.

inability to pay into account in making an equitable allocation. Should Ross later be determined to be defunct, each liable party will be responsible for its proportional share of Ross's allocated amount. *See 42 U.S.C. § 9613(f); see also Newmont*, 2008 WL 4621566, at *62.

In determining Ross's equitable share of the response costs, the court deems the following facts important:

- i. Planters manufactured fertilizer on the Site for sixty of the sixty-six years the fertilizer plant was in operation. *See supra ¶ 20.*
- ii. As the only property owner that burned pyrite slag, Planters generated the vast majority of arsenic that is found on the property today. *See supra ¶ 34.*
- iii. Planters introduced much of the lead contamination to the Site. *See supra ¶ 34.*
- iv. Planters constructed several buildings on the Site during its ownership period. *See supra ¶¶ 30, 32, 37, 38, and 39.*
- v. Planters owned and operated the site prior to the enactment of CERCLA when the issue of environmental contamination was not well known. There is no evidence that Planters' actions were illegal or contrary to industry standards at the time. *See supra ¶¶ 20 and 78.*
- vi. Planters benefitted economically from its operations that caused the contamination. *See supra ¶ 32.*
- vii. The evidence suggests that the Ross Directors knew that Ross might be held liable for contamination at the Site and took action to make the company judgment proof. *See supra ¶¶ 44-48.*

3. PCS

The court found above that PCS is subject to liability as the successor to CNC under CERCLA § 107(a)(1). The court deems the following factors important in determining PCS's equitable share of the response costs:

- i. CNC conducted manufacturing operations on the Site for six out of the sixty years the fertilizer plant was in operation. *See supra ¶ 54.*

- ii. CNC generated no pyrite slag. *See supra ¶ 57.*
- iii. All of the lead and arsenic on the Site that was not introduced by Planters, was introduced by CNC.
- iv. When CNC ceased operations, it demolished all of the structures on the Site. This demolition was highly disruptive to the Site and took place over several years, leaving contaminants open to the elements. *See supra ¶¶ 69-76.*
- v. Prior to selling the property to the Holcombe and Fair Parties, CNC graded the Site. *See supra ¶ 79.*
- vi. CNC knew that its manufacturing operations contaminated the Site and yet did not notify the Holcombe and Fair Parties or EPA of the contamination. *See supra ¶¶ 77 and 80.*
- vii. CNC took more steps to protect the environment than did Planters, but it did not follow the more stringent environmental standards it imposed at its Moultrie, Georgia plant. *See supra ¶ 62 and 77.*
- viii. CNC left lead sheeting discarded on the Site. *See supra ¶ 60.*
- ix. CNC benefitted economically from manufacturing fertilizer on the Site. *See supra ¶ 54.*
- x. PCS's predecessor, Arcadian reported the contamination of the Site to EPA. *See supra ¶ 105.*

4. Holcombe and Fair Parties

i. *Whether the Holcombe and Fair Parties are PRPs*

As previously noted, a PRP includes "any person who, at the time of disposal of a hazardous substance, owned or operated any facility at which such hazardous substances were disposed." 42 U.S.C. § 9607(a)(2). Title 42, United States Code, Section 6903(a) defines "disposal" as "the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including

ground waters.” The Fourth Circuit has ruled that “§ 9607(a)(2) imposes liability not only for active involvement in placing hazardous waste on a facility, but for ownership of a facility at a time that hazardous waste was ‘spilling’ or ‘leaking.’” *Nurad*, 966 F.2d at 846. Hazardous materials can be disposed of multiple times such as when hazardous materials are moved or dispersed. *See Tanglewood*, 849 F.2d at 1573; *Kaiser*, 976 F.2d at 1342. “[A] ‘disposal’ may occur when a party disperses contaminated soil during the course of grading and filling a construction site.” *Redwing*, 94 F.3d at 1511-12.

The record establishes that at the time the Holcombe and Fair Parties purchased the Site, it was already contaminated with lead and arsenic from the operations of the fertilizer plant. In constructing the Milford Street extension and extending water and sewer lines through the area where the fertilizer plant was once located, the Holcombe and Fair Parties engaged in earthmoving activities that caused the disposal of hazardous wastes on the property. The Holcombe and Fair Parties are subject to CERCLA liability under 42 U.S.C. § 9607(a)(2) as owners of the Site at a time when a disposal of hazardous substances occurred.¹¹

ii. *Innocent Landowner Defense*

The Holcombe and Fair Parties seek to avoid liability for response costs associated with the Site by establishing CERCLA’s innocent landowner defense. *See* 42 U.S.C.A. § 9607(b)(3). To establish the innocent landowner defense, a property owner must demonstrate “(1) that another party was the ‘sole cause’ of the release of hazardous substances and the damages caused thereby; (2) that

¹¹ Holcombe, Holcombe Enterprises and Fair are not liable under CERCLA §107(a)(1) as current owners and operators of the facility because they did not own any portion of the Site at the time this action was commenced. Courts in this circuit have held that CERCLA §107(a)(1) applies only to the owner and operator at the time the enforcement action or complaint for response costs is filed. *See Trinity*, 150 F.3d at 395(CERCLA imposes strict liability on the owner of a site “at the time of the enforcement action”); *see also United States v. Fleet Factors Corp.*, 901 F.2d 1550, 1554 (11th Cir. 1990)(“Within the meaning of Section 107(a)(1) of CERCLA, the current owner means the owner at the time of filing of the complaint.”).

the other, responsible party did not cause the release in connection with a contractual, employment, or agency relationship with the [property owner]; and (3) that the [property owner] exercised due care and guarded against the foreseeable acts or omissions of the responsible party.” *Trinity*, 150 F.3d at 396 (quoting *Westfarm*, 66 F.3d at 682 (quoting 42 U.S.C.A. § 9607(b)(3))).

In *United States v. Honeywell Int'l, Inc.*, 542 F. Supp. 2d 1188, 1200 (E.D. Cal. 2008), the District Court for the Eastern District of California denied a party the innocent landowner defense because the party’s affirmative steps in grading and excavating the property agitated the soil and caused the release of contaminants during the party’s ownership period. The record indicates that the Holcombe and Fair Parties constructed the Milford Street extension and extended water and sewer lines through contaminated soil. These actions agitated the soil, causing new releases of hazardous substances. Therefore, the Holcombe and Fair Parties did not meet the first element of the innocent landowner exception.

The Holcombe and Fair Parties also cannot establish the due care element of the innocent landowner defense. The due care requirement is satisfied by taking precautionary action against the foreseeable actions of third parties responsible for the hazardous substances in question. See *Monsanto*, 858 F.2d at 169. The record discloses the after discovering the contaminated state of the Site, the Holcombe and Fair parties made no effort to inform environmental authorities of the contamination. Although the placement of ROC on the Site by the Holcombe and Fair parties was an environmental benefit to the Site, the Holcombe and Fair Parties only placed ROC on parcels of the Site as they were leased. Due care would have involved the Holcombe and Fair Parties capping the entire Site with ROC upon learning of the contamination in order to prevent air dispersion and human contact with contaminants. In addition, after environmental authorities became involved with

the Site, the Holcombe and Fair Parties failed to follow their instructions. For example, instead of submitting a plan to control surface water runoff to EPA as agreed, the Holcombe and Fair Parties began the construction of detention ponds without approval. The Holcombe and Fair Parties also exhibited a lack of due care by failing to maintain the detention ponds on the Site. The court finds that the Holcombe and Fair Parties have not established the innocent landowner defense and will be allocated an equitable share of response costs for the remediation of the Site.

iii. *Allocation*

The court deems the following factors important in determining the equitable share of the response costs to be allocated to the Holcombe and Fair Parties:

- a. The Holcombe and Fair Parties did not know of the contamination at the time they purchased the Site. *See supra ¶ 86.*
- b. There is no evidence that the Holcombe and Fair Parties introduced any hazardous substances to the Site. *See supra ¶ 135.*
- c. The Holcombe and Fair Parties contributed to the spread of the contamination on the Site by constructing the Milford Street extension and extending utility lines. *See supra ¶¶ 91-92.*
- d. The addition of water and sewer lines on the Site prevented the use of contaminated groundwater thereby protecting human health. *See supra ¶ 93.*
- e. The Holcombe and Fair Parties did not disclose the contamination of the Site to the City prior to deeding it the Milford Street extension despite knowledge of the contamination. *See supra ¶¶ 98-101, and 109.*
- f. After learning of the contamination, the Holcombe and Fair Parties left the contaminated soil exposed to the elements until each parcel of property was leased and capped with ROC. *See supra ¶¶ 95, 98, 102, 111, 112, 114, 117, 120, and 129.*
- g. The ROC covering the majority of the Site provided important benefits to the Site. *See supra ¶ 131.*
- h. The Holcombe and Fair Parties did not commission additional soil sampling

despite GEL's advice that additional testing was appropriate. *See supra ¶ 103.*

- i. The Holcombe and Fair Parties' actions in response to requests from EPA and DHEC were not fully compliant. *See supra ¶¶ 123, 125, and 131.*
- j. The Holcombe and Fair Parties profited from leasing out and later selling the Site despite knowing of the contamination and doing little to fix it. *See supra ¶ 142.*

5. RHCE

i. *Innocent Landowner Defense*

The court ruled above that RHCE is a PRP under §§ 107(a)(1) and (2) of CERCLA. RHCE seeks to avoid liability for response costs associated with the Site by invoking the innocent landowner defense. *See 42 U.S.C.A. § 9607(b)(3).* The record indicates that RHCE commissioned the following construction on its parcel: 1) the excavation of a 1380 cubic foot pond, 2) the installation of two fifty-foot asphalt driveways, 3) the stripping of six inches of topsoil and storing of this soil on an adjacent parcel, and 4) grading and proof rolling of the parcel. These actions agitated the soil, causing new releases of hazardous substances. Therefore, RHCE cannot meet the first element of the innocent landowner defense.

The second prong of the innocent landowner defense requires that RHCE not know and have no reason to know that any hazardous substance had been released at that facility. *See United States v. A&N Cleaners and Launderers, Inc.*, 788 F. Supp. 1317, 1329-30 (S.D.N.Y. 1992) (citing 42 U.S.C. § 9601(35)(A)). The record indicates that the Holcombe and Fair Parties disclosed at least some of the contamination to RHCE before the parcel was conveyed to Hood, President of RHCE. In addition, the grading and proof rolling of the parcel indicates a lack of due care on the part of RHCE when it had knowledge of the contamination. RHCE has not established the innocent

landowner defense and will be allocated an equitable share of response costs for the remediation of the Site.

ii. *Allocation*

The court deems the following factors important in determining the equitable share of RHCE:

- a. RHCE did not introduce any lead, arsenic or cPAHs to the Site. *See supra ¶ 161.*
- b. RHCE only leases a two-acre parcel on the Site, which amounts to at most, 5.9% (2.00 acres/33.94 acres = 5.9%) of the remediation area. *See supra ¶¶ 28 and 158.*
- c. If releases of motor oil or gear oil occurred on RHCE's parcel, such releases are not driving the remediation and will not affect the cost of remediation. *See supra ¶¶ 159 and 161.*
- d. RHCE engaged in some construction on its parcel. *See supra ¶¶ 157 and 160.*
- e. The placement of ROC and construction of a detention pond on the RHCE parcel were of some benefit to the environment. *See supra ¶¶ 131 and 157.*
- f. EPA is aware of RHCE's dropyard operation and has not requested that RHCE cease operations. *See supra ¶ 159.*

6. Allwaste

i. *Whether Allwaste is a PRP*

Current owners and operators of a facility are covered persons under CERCLA. 42 U.S.C. § 9607(a)(1). Ownership status in CERCLA cases is determined at the time of the filing of the complaint. *See Trinity*, 150 F.3d at 395 (“Generally, CERCLA imposes strict liability on the owner of the property at the time an enforcement action is brought, even if that party did not own the property when the pollution took place.”); *see also United States v. Fleet Factors Corp.*, 901 F.2d 1550, 1554 (11th Cir. 1990) (“Within the meaning of Section 107(a)(1) of CERCLA, the current

owner means the owner at the time of filing of the complaint.”). This action was filed in 2005. Allwaste did not sell its parcel to Ashley until 2008. Thus, Allwaste is potentially responsible for response costs as a current owner of the Site. *See 42 U.S.C. §§ 9613(g), 9607(a)(1).*

ii. *Allocation*

The court deems the following factors important in determining the equitable share of Allwaste:

- a. Allwaste did not introduce any lead, arsenic or cPAHs to the Site. *See supra ¶¶ 143-154*
- b. Allwaste only owned a three-acre parcel and leased a two-acre parcel on the Site, which amounts to at most, 14.7% (5.00 acres/33.94 acres = 14.7%) of the remediation area. *See supra ¶ 144.*
- c. If releases of motor oil or gear oil occurred on Allwaste’s parcel, such releases are not driving the cost of remediation. *See supra ¶ 154.*
- d. During its ownership period, Allwaste constructed a new building on its property, expanded existing structures, and modified the underground components of its wastewater collection system. *See supra ¶ 147.*
- e. Stained cement indicates that some leaks of cleaning solvents occurred during Allwaste’s operations. If any leaks occurred from Allwaste’s business activities, however, those releases contributed little to the need for environmental remediation. *See supra ¶ 149.*
- f. Allwaste allowed the sumps and pads in its facility to deteriorate to the point where they were identified as RECs. *See supra ¶ 149.*

7. The City

i. *Whether the City is a PRP*

Current owners and operators of a facility are liable for response costs under CERCLA. 42 U.S.C. § 9607(a)(1). The City contends that it is not a current owner or operator of the Site because it owns a right-of-way and does not manage any part of the Site. To determine whether the City has

a current ownership interest in the Site, the court looks to the deed transferring the Milford Street extension to the City. [PCS Ex. 69].

“The construction of a clear and unambiguous deed is a question of law for the court.” *Bennett v. Inv. Title Ins. Co.*, 635 S.E.2d 649, 655 (S.C. Ct. App. 2006). In ascertaining the meaning of a deed, the court looks to the intention of the grantor. *See id.* To determine the intention of the grantor, the court must construe the deed as a whole. *Id.* When a deed is ambiguous as to intention, extrinsic evidence may be considered to explain it. *Gardner v. Mozingo*, 358 S.E.2d 390, 391-92 (S.C. 1987); *see Bellamy v. Bellamy*, 355 S.E.2d 1, 3 (S.C. Ct. App. 1987).

In the 1991 deed, the City agreed to abandon the turnaround at the end of the Milford Street extension in exchange for “owning all of Milford Street as shown on the plat” attached to the deed. [PCS Ex. 69 at 1]. The Holcombe and Fair Parties “remised, released, and forever quit-claimed” the Extension of Millford Street to the City. [PCS Ex. 69 at 1]. The Holcombe and Fair Parties retained no interest in the premises, as the deed provided that the grantors shall not “at any time hereafter, by any way or means, have, claim, or demand any right or title to the aforesaid premises or appurtenances, or any part of parcel thereof, forever.” [PCS Ex. 69 at 2]. The deed uses the term “right-of-way” numerous times to describe the Milford Street extension. [PCS Ex. 69 at 1]. The court finds that the deed is ambiguous as to whether it grants a right-of-way or a fee simple in the Milford Street extension. Therefore, the court will consider extrinsic evidence to determine the intention of the grantors, the Holcombe and Fair Parties.

The deed makes no provision for the property to revert to the Holcombe and Fair Parties, indicating that the deed transferred all ownership rights to the City. Fair testified at trial that the deed resulted in the City owning the “road and the land under it.” [Trial Tr. 2658:23-2659:3]. Based

upon this evidence, the court finds that the intent of the grantor was to grant to the City the Milford Street extension in fee simple. Therefore, the City is an owner of part of the Site and is a PRP pursuant to 42 U.S.C. § 9607(a)(1).

Ownership is not required by CERCLA where a party is an “operator” for purposes of the statute. *See Atchison*, 2003 WL 25518047, at *58-59. In order for a party to be held liable as an operator, the person must have participated in the day-to-day or operational management of the facility. *Acme Fill Corp. v. Althin CD Med., Inc.*, 1995 WL 597300 at *7 (N.D. Cal. Aug. 22, 1995); *see also United States v. Dart Indus., Inc.*, 847 F.2d 144 (4th Cir. 1988). The court finds that the City’s ownership of the Milford Street extension does not meet the definition of “operator” because once the Milford Street extension was built, it did not require day-to-day management. In fact, there is no evidence in the record that the City performed any management activities related to the Milford Street extension. The City is not an operator for purposes of CERCLA liability. However, as found above, the City is a PRP because of its ownership status.

ii. *Allocation*

The court deems the following factors important in determining the equitable share of the City:

- a. The City did not introduce any lead, arsenic, or cPAHs to the Site. *See supra* ¶ 173.
- b. The City did not engage in any construction activities on the Site. *See supra* ¶ 167.
- c. The City only owns 1.28 acres, which comprises about 3.7% (1.28 acres/33.95 acres = 3.7%) of the Site. *See supra* ¶ 28.
- d. The asphalt road acts as a cap over some of the contamination at the Site, preventing human contact with contamination. *See supra* ¶ 171.

- e. There is no evidence that the City was notified of the contamination at the Site prior to taking ownership of the road. *See supra ¶ 169.*
- f. The City has taken an active role in financing the remediation by issuing bonds. *See supra ¶ 175.*
- g. The City did not acquire the road for profit. *See supra ¶ 174.*

The court concludes that the City took no active part in introducing contamination to the Site or to the spread of contamination throughout the parcel. Any releases that occurred on the City's parcel during its period of ownership were due to the passive migration of chemicals or runoff, which would have occurred during all ownership periods.

8. Ashley

i. *Bona Fide Prospective Purchaser Defense*

To establish the bona fide prospective purchaser defense ("BFPP"), Ashley must have acquired ownership of the facility after 2002 and prove each of the following eight elements by a preponderance of the evidence:

(A) Disposal prior to acquisition

All disposal of hazardous substances at the facility occurred before the person acquired the facility.

(B) Inquiries

(i) In general

The person made all appropriate inquiries into the previous ownership and uses of the facility in accordance with generally accepted good commercial and customary standards and practices in accordance with clauses (ii) and (iii).

(ii) Standards and practices

The standards and practices referred to in clauses (ii) and (iv) of paragraph (35)(B) of this section shall be considered to satisfy the requirements of this

subparagraph.

...

(C) Notices

The person provides all legally required notices with respect to the discovery or release of any hazardous substances at the facility.

(D) Care

The person exercises appropriate care with respect to hazardous substances found at the facility by taking reasonable steps to--

- (i) stop any continuing release;
- (ii) prevent any threatened future release; and
- (iii) prevent or limit human, environmental, or natural resource exposure to any previously released hazardous substance.

(E) Cooperation, assistance, and access

The person provides full cooperation, assistance, and access to persons that are authorized to conduct response actions or natural resource restoration at a . . . or facility (including the cooperation and access necessary for the installation, integrity, operation, and maintenance of any complete or partial response actions or natural resource restoration at the vessel or facility).

(F) Institutional control

The person--

- (i) is in compliance with any land use restrictions established or relied on in connection with the response action at a . . . facility; and
- (ii) does not impede the effectiveness or integrity of any institutional control employed at the . . . facility in connection with a response action.

(G) Requests; subpoenas

The person complies with any request for information or administrative subpoena issued by the President under this chapter.

(H) No affiliation

The person is not--

(i) potentially liable, or affiliated with any other person that is potentially liable, for response costs at a facility through--

(I) any direct or indirect familial relationship; or

(II) any contractual, corporate, or financial relationship (other than a contractual, corporate, or financial relationship that is created by the instruments by which title to the facility is conveyed or financed or by a contract for the sale of goods or services); or

(ii) the result of a reorganization of a business entity that was potentially liable.

42 U.S.C. § 9601(40). Ashley first acquired a portion of the Site in 2003. Therefore, Ashley is eligible for the BFPP defense if it establishes the eight elements by a preponderance of the evidence.

a. *Whether All Disposals Of Hazardous Substances Occurred Before Ashley Acquired Part of the Site*

This element requires Ashley to prove that all disposals of hazardous substances occurred before it acquired the Site. 42 U.S.C. § 9601(40)(A). As previously noted, “disposal” is defined as

the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

42 U.S.C. § 6903(3); 42 U.S.C. § 9601(29). The Fourth Circuit has ruled that disposals include not only active involvement in the ‘dumping’ or ‘placing’ of hazardous waste at the facility, but for ownership of the facility at a time that hazardous waste was ‘spilling’ or ‘leaking.’ *Nurad*, 966 F.2d at 846. As has been previously noted, disposals are not limited to one-time occurrences, but instead include times when hazardous materials are moved or dispersed. See *Tanglewood*, 849 F.2d at 1573;

Kaiser, 976 F.2d at 1342. A “disposal” “may occur when a party disperses contaminated soil. . . .”

Redwing, 94 F.3d at 1511-12.

It is likely that there were disposals on the Allwaste property after Ashley tore down the structures on the Allwaste parcel in 2008 because the sumps contained hazardous substances, were cracked, and were allowed to fill with rainwater. [Trial Tr. 760:14-761:1]. Ashley did not conduct testing to determine whether disposals occurred on the Allwaste parcel during its ownership period. Specifically, Ashley did not test under the concrete pads, sumps, or trench to see if the soil under those structures was contaminated. Ashley attempted to introduce evidence that no disposals occurred after its acquisition of the property through the testimony of Rigganbach. However, the court struck this testimony at trial because Rigganbach’s opinion on this issue was not disclosed prior to trial. [Trial Tr. 1399:1-17]. The court concludes that Ashley did not prove that no disposals occurred on the Site after its acquisition of the Site.

b. *All Appropriate Inquiries (“AAI”)*

This element requires Ashley to prove that it performed AAI prior to acquiring the Site. 42 U.S.C. § 9601(40)(B). At the time Ashley would have been performing its pre-purchase inquiry on the Holcombe and Fair Parties parcel, prior to 2003, interim standards were in place to meet the AAI standard.¹² 42 U.S.C. § 9601(40)(B); 68 FR 24888-01. The AAI standard could be met for the Holcombe and Fair Parcel by complying with ASTM Standard E1527-00.¹³ At the time Ashley performed its pre-purchase inquiry on the Allwaste parcel, a final standard for AAI’s had been

¹² The final standard for performing all appropriate inquiries became effective on November 1, 2006. 40 C.F.R. §§ 312, *et seq.*

¹³ Ashley could also have satisfied the AAI standard with ASTM Standard E1527-97. However, the only ASTM Standard admitted at trial was ASTM Standard E1527-00.

promulgated, 40 C.F.R. §§ 312, *et seq.*; this is the standard applicable to the Allwaste parcel.

Ashley acquired a portion of the Site from the Holcombe and Fair Parties on November 24, 2003. Prior to the acquisition of the Holcombe and Fair Parties parcel, Ashley hired GEL to conduct AAI. GEL prepared a September 25, 2003 Phase I Environmental Site Assessment, and certified that its inquiry was in compliance with ASTM E1527-00. [Ash. Ex. 110 at 1-2]. Ashley also hired GEL to conduct a Phase I Environmental Site Assessment on the Allwaste parcel prior to purchase. [Ash. Ex. 179]. GEL certified in its report on the Allwaste parcel that its inquiry was in compliance with ASTM E1527-05.¹⁴ [Ash. Ex. 179 at 4]. While PCS points to some inconsistencies between GEL's Phase I Reports and the relevant ASTM Standards, the court finds that such inconsistencies lack significance. What is important is that Ashley acted reasonably; it hired an expert to conduct an AAI and relied on that expert to perform its job properly. The court finds that Ashley properly conducted AAI.

c. *All Legally Required Notices*

Title 42, United States Code, Section 9603(a) requires that any person in charge of a facility immediately notify the National Response Center of any release of a hazardous substance once it has knowledge of a release. Ashley contends that there have been no releases of hazardous substances at the Site since Ashley's acquisition of the property that required notice to EPA or DHEC. The record does not establish that any releases occurred on the Site subsequent to Ashley acquiring ownership. The court finds that Ashley has met its burden of proving that it made all legally required notices.

¹⁴ EPA has stated that ASTM Standard E1527-05 is consistent with the AAI final rule. Environmental Protection Agency, *Comparison of the Final All Appropriate Inquiries Standard and the STM E1527-00 Environmental Site Assessment Standard*, at 1 (2005), http://www.epa.gov/brownfields/aai/compare_astm.pdf.

d. *Whether Ashley has Exercised Appropriate Care*

To demonstrate that it has exercised appropriate care, Ashley must prove that it took reasonable steps to: 1) stop any continuing release; 2) prevent any threatened future release; and 3) prevent or limit human, environmental, or natural resource exposure to any previously released hazardous substance. 42 U.S.C. § 9601(40)(D). According to EPA, Congress intended the “reasonable steps” requirement to be “consonant with traditional common law principles and the existing CERCLA due care requirement.” [Ash. Ex. 100, at 9 & n.9]. Under the CERCLA due care requirements, a party must establish by a preponderance of the evidence that it “exercised due care with respect to the hazardous substance concerned, taking into consideration the characteristics of such hazardous substance, in light of all relevant facts or circumstances.” [Ash. Ex. 100 at 11]. “[E]xisting case law on due care provides a reference point for evaluating the reasonable steps requirement.” [Ash. Ex. 100, at 11]. According to EPA, “doing nothing in the face of a known or suspected environmental hazard would likely be insufficient.” [Ash. Ex. 100, Attachment B at 5].

EPA’s Interim Guidance on BFPP status states as follows:

The pre-purchase “appropriate inquiry” by the [BFPP] will most likely inform the [BFPP] as to the nature and extent of contamination on the property and what might be considered reasonable steps regarding the contamination – how to stop continuing releases, prevent threatened future releases, and prevent or limit human, environmental and natural resource exposures. Knowledge of contamination and the opportunity to plan prior to purchase should be factors in evaluating what are reasonable steps, and could result in greater reasonable steps obligations for a [BFPP].

[Ash. Ex. 100 at 11].

The court concludes the Ashley did not exercise appropriate care with regard to hazardous substances. First, GEL identified the sumps and concrete pads at the Allwaste parcel as RECs. When Ashley demolished all of the above-ground structures on the Allwaste parcel, but failed to

clean out and fill in the sumps, and leaving them exposed to the elements, it may have exacerbated these conditions. At trial, experts testified that Ashley should have capped, filled, or removed the sumps at the time it demolished the above-ground structures. [Trial Tr. 401:14-402:2, 2419:20-2421:19, 2434:18-2436:4]. Ashley's later action commissioning GEL to test, clean, and fill the sumps with concrete came too late to prevent possible releases.

Second, Ashley's failure to 1) prevent such a debris pile from accumulating on the Site, 2) investigate the contents of the debris pile, and 3) remove the debris pile for over a year indicates a lack of appropriate care. [Trial Tr. 552:8-14, 552:24-553:15; PCS Ex. 3, at 1; PCS Ex. 19 at A05_01238, A04_05365, A04_05368, A04_05370, A04_05376, A04_05380]. Third, Ashley failed to adequately maintain the ROC cover on the Site. For example, the ROC cover on the parcel Ashley leased to Allwaste from 2003 to 2008, was deteriorated in 2004. [PCS Ex. 22 at A 00283, Fig. 1-2]. Ashley has not carried its burden of proving by a preponderance of the evidence that it exercised appropriate care with respect to hazardous substances found at the facility.

e. *Whether Ashley Provided Full Cooperation, Assistance and Access*

This element requires that Ashley prove that it provided "full cooperation, assistance, and access to persons that are authorized to conduct response actions or natural resource restoration at a . . . facility." 42 U.S.C. § 9601(40)(E). Ashley has provided the court with sufficient evidence to meet its burden of proof on this element of the BFPP defense. When Ashley acquired the Holcombe and Fair Parties parcel, it immediately notified EPA of its ownership and asked EPA to advise Ashley if EPA desired Ashley to take specific action. [Ash. Ex. 114]. The record demonstrates that Ashley's cooperation with EPA has been ongoing since it purchased the Site. [Ash. Exs. 187 and 188].

f. *Institutional Controls*

This element requires that Ashley prove that it: 1) is in compliance with any land use restrictions at the facility; and 2) is not impeding any institutional control employed at the facility in connection with a response action. 42 U.S.C. § 9601(40)(F). Freeman testified at trial that there are no land use restrictions or unusual institutional controls in place at the Site and that Ashley is in compliance with any controls in place. [Trial Tr. 594:16-24]. This testimony has not been contradicted. The court finds that Ashley has met its burden of proof on this element.

g. *Compliance with Requests and Subpoenas*

This element requires that Ashley prove that it has complied with any request for information or administrative subpoena directed to it. 42 U.S.C. § 9601(40)(G). Freeman testified at trial that Ashley has complied with all information requests and subpoenas that it has received from EPA. [Trial Tr. 599:12-16]. Ashley's Exhibit number 116 is an example of Ashley responding to a request for information by EPA. [Ash. Ex. 116]. The court finds that Ashley has met its burden of proof on this element.

h. *No Affiliation*

This element requires that Ashley prove that it is not: 1) a potentially responsible party; 2) affiliated with persons that are potentially liable for response costs at the Site through: a) any direct or indirect familial relationship; b) any contractual, corporate, or financial relationship “(other than a contractual, corporate, or financial relationship that is created by the instruments by which title to the facility is conveyed or financed or by a contract for the sale of goods or services)”; or 3) “the result of a reorganization of a business entity that was potentially liable.” 42 U.S.C. § 9601(40)(H). EPA has stated that in deciding what “affiliations” are prohibited by CERCLA, courts should be

guided by “Congress’s intent of preventing transactions structured to avoid liability.” [Ash. Ex. 100 at 5]. There is no allegation in this case that Ashley is the result of a reorganization of a business entity that was potentially liable.

1. Whether Ashley is a PRP

As previously noted, current owners and operators of a facility are liable for response costs under CERCLA. 42 U.S.C. § 9607(a)(1). As the current owner of the majority of the Site on which hazardous materials are still leaching through the soil, Ashley can be held liable for response costs. Ashley has failed to meet its burden of proof on this element.

2. Affiliations with Others

Ashley has no direct or indirect familial relationship with any of the other PRPs in this case. [Trial Tr. 141:14-145:2; 181:13-182:9]. However, Ashley has released and indemnified the Holcombe and Fair Parties and Allwaste from environmental liability for contamination at the Site. [Ash. Ex. 94, 113; Allwaste Exs. 1-2]. These releases were given in connection with the purchases of parcels of property on the Site. Because of its indemnification and release of the Holcombe and Fair Parties, Ashley attempted to persuade EPA not to take enforcement action to recover for any harm at the Site caused by the Holcombe and Fair Parties. [PCS Ex. 256 at 2]. In indemnifying the Holcombe and Fair Parties, Ashley took the risk that the Holcombe and Fair Parties might be liable for response costs. Ashley’s efforts to discourage EPA from recovering response costs covered by the indemnification reveals just the sort of affiliation Congress intended to discourage. The court finds that Ashley’s affiliation with the Holcombe and Fair Parties precludes the application of the BFPP defense. In summary, Ashley failed to meet its burden of proving several of the elements of the BFPP defense and will be held liable for an equitable share of response costs.

ii. *Allocation*

The court deems the following factors important in determining the equitable share of Ashley:

- a. Ashley did not engage in manufacturing activities on the Site. *See supra* ¶ 205.
- b. Ashley has made efforts to secure and restrict access to the Site. *See supra* ¶ 180.
- c. Ashley performed extensive environmental testing at the Site and performed AAI. *See supra* ¶¶ 181, 185, 188, 191, 193, and 201; Part II.D.8.i.b.
- d. Ashley has cooperated with EPA. *See supra* Part II.D.8.i.e.
- e. Ashley's ultimate goal in remediating the Site and conducting the Magnolia Project is to cleanup the property for productive use and ultimately make a profit. *See supra* ¶¶ 177-178.
- f. Ashley has attempted to discourage EPA from pursuing recovery for response costs caused by the Holcombe and Fair Parties. *See supra* ¶ 197.
- g. Ashley failed to exercise appropriate care with regard to the Site. *See supra* Part II.D.8.i.d.
- h. Ashley may have permitted additional releases of hazardous materials to occur on the Allwaste parcel. *See supra* Part II.D.8.i.a.

9. *Equitable Shares*

Taking all of the foregoing into account, the court finds that in accordance with equity, the parties shall be liable for the following percentages of the past and future response costs to clean up the Site:

- i. Ross is responsible for forty-five percent (45%);
- ii. PCS is responsible for thirty percent (30%);

- iii. The Holcombe and Fair Parties are responsible for sixteen percent (16%);¹⁵
- iv. RHCE is responsible for one percent (1%);
- v. Allwaste is responsible for three percent (3%);¹⁶
- vi. The City of Charleston is responsible for zero percent (0%);¹⁷ and
- vii. Ashley is responsible for five percent (5%).

If it is subsequently determined that any liable party is adjudged unable to pay all or a portion of its equitable share, that share, less recovered amounts, shall be reallocated to the other liable parties on a pro rata basis in accordance with the above percentage shares. *See, e.g., United States v. Stringfellow*, No. CV-83-2501-JMI, 1995 WL 450856 (C.D. Cal. Jan. 24, 1995) (the court first allocates to each responsible party; if one party is later adjudicated bankrupt, the court then reallocates this share to the other parties).

E. Ross Indemnification of PCS

PCS argues that it, as successor to CNC, has a valid indemnification agreement with Ross, as successor to Planters, that makes Ross liable to PCS for all costs and expenses that it must incur as a result of Ross's acts and omissions.¹⁸ PCS contends that because of this agreement, the court should impose on Ross, Ross's share of the response costs "without regard for whether Ross's share

¹⁵ In accordance with the court's ruling on the Holcombe and Fair Parties' Motion for Partial Judgment on the Findings [Entry 520], Ashley is responsible for this share.

¹⁶ In accordance with the court's ruling on Allwaste's Motion for Partial Judgment on the Findings [Entry 517], Ashley is responsible for this share.

¹⁷ Based on the facts and equities, the court determines that the City should be allocated a zero percent share of liability for the cost of remediation at the Site. *Alcan*, 964 F.2d at 845 (a PRP can avoid liability with proof that its release of hazardous substances did not contribute to the response costs).

¹⁸ In its prior order, the court found that the indemnification agreement, PCS Ex. 167, had not been admitted. However, upon further examination, the court has located PCS Ex. 276, which contains the indemnification agreement and was admitted at trial. [Trial Tr. 3073:25-3081:12].

of liability would be an orphan share under CERCLA.” PCS’s Proposed Findings at 176. PCS also contends that Ross should be held “liable to PCS for any liability that PCS would otherwise incur.” *Id.* at 178. PCS further contends that Ross should be assessed with costs and expenses that PCS incurred in bringing Ross into this litigation and establishing Ross’s liability.

After considering the indemnification agreement, the court concludes that it has allocated Ross its equitable share of the response costs for remediating the Site. *See supra* at 84-85. PCS remains liable for PCS’s contribution to the costs of the remediation.

III. CONCLUSION

Allwaste’s Motion for Judgment on Partial Findings [Entry 517] is **granted**. The Holcombe and Fair Parties’ Motion for Judgment as a Matter of Law [Entry 520] is **granted**. RHCE’s Motion for Judgment on Partial Findings [Entry 521] is **denied**. PCS is liable to Ashley for response costs pursuant to § 107(a)(2) of CERCLA. The harm at the Site is indivisible and PCS’s liability is joint and several.

Judgment shall be entered for Ashley in the amount of \$87,404.82 plus interest against Ross; in the amount of \$58,269.88 plus interest against PCS; and in the amount of \$1,942.32 plus interest against RHCE, which represents those parties’ respective shares of the total past CERCLA response costs of \$194,232.94 incurred by Ashley prior to this suit.¹⁹

Declaratory judgment shall be entered for Ashley against Ross, PCS and RHCE for future response costs at the Site in the respective percentages of 45%, 30% and 1% of the amounts

¹⁹ The shares of the Holcombe and Fair Parties and Allwaste have not been included as Ashley is responsible for those costs pursuant to its indemnification agreements.

incurred.²⁰ The court retains jurisdiction over the case should it become necessary to determine whether the final remediation plan for the Site is consistent with the National Contingency Plan.

IT IS SO ORDERED.

s/ Margaret B. Seymour

The Honorable Margaret B. Seymour
United States District Judge

Columbia, South Carolina

October 13, 2010

Nunc pro tunc date: September 30, 2010

²⁰ The shares of the Holcombe and Fair Parties and Allwaste have not been included as Ashley is responsible for those costs pursuant to its indemnification agreements.